

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS
SHERMAN DIVISION

IMPERIUM IP HOLDINGS (CAYMAN) : DOCKET NO. 4:14CV371
:
VS. : SHERMAN, TEXAS
:
FEBRUARY 5, 2016
SAMSUNG ELECTRONICS CO. : AFTERNOON SESSION

TRANSCRIPT OF TRIAL
BEFORE THE HONORABLE AMOS L. MAZZANT,
UNITED STATES DISTRICT JUDGE, AND A JURY

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PROCEEDINGS REPORTED BY MECHANICAL STENOGRAPHY, TRANSCRIPT
PRODUCED BY COMPUTER-AIDED TRANSCRIPTION.

1 (Jury out.)

2 THE COURT: Go ahead and bring the jury in now.

3 COURT SECURITY OFFICER: All rise for the jury.

4 (Jury in.)

5 THE COURT: Please be seated.

6 Sir, go ahead and be seated. Go ahead and continue.

7 MR. JENNER: Thank you, Your Honor.

8 DR. RAY PERRYMAN, DEFENDANTS' WITNESS, PREVIOUSLY SWORN

9 DIRECT EXAMINATION (CONTINUED)

10 BY MR. JENNER:

11 Q. Dr. Perryman, are you all set there?

12 A. Yes, sir, I am.

13 MR. JENNER: Could we have back up Demonstrative

14 Exhibit 402?

15 Q. (By Mr. Jenner) Okay. Dr. Perryman, here is the chart

16 of the Georgia-Pacific Factors, and I believe you've now

17 discussed your evaluation of Factors 1, 2, and 3.

18 A. Yes, sir.

19 Q. Correct?

20 A. Yes, sir.

21 Q. What's that next factor that you considered relevant
22 here?

23 A. Well, actually I want to take a few of them together.

24 It's 9, 10, and 13.

25 Q. What are Factors 9, 10, and 13, and why do you want to

1 take them together?

2 A. Well, 9 and 10 are very similar. It's become pretty
3 customary to take them together. One talks about the
4 utility and advantages of the -- of the -- of the patent,
5 and the other one talks about the nature and character of
6 the -- of the patented invention and so they're pretty
7 similar.

8 And then 13 talks about the portion any property that
9 gets allocated to that technology because of its -- its
10 nature and character, so they -- they fit together really
11 nicely, and the same documents and evidence tend to apply to
12 all three of them.

13 Q. And generally, what kinds of evidence did you consider
14 about how those three factors apply here?

15 A. Well, here we're trying to figure out what the -- the
16 value of the technology, what the technology does and that
17 sort of thing, so I -- I visited with the experts -- the
18 technical experts, read their depositions. I looked at the
19 depositions of the inventors of the technology to see what
20 they had to say about it. I looked at -- at things that --
21 that Samsung and ESS and others had said about the
22 technology. And so basically just a lot of information,
23 trying to gather what do these products -- these patents
24 contribute to the overall image sensor and end products.

25 Q. Okay. First, what kind of information did you get from

1 Samsung's experts?

2 A. Well, I talked to each one of them, and they described
3 to me the nature of the technology that was allegedly in the
4 patents and what it did, how it fit in, how important it was
5 relative to other things going on in the products. And --
6 and basically just gave me a -- the level of technical
7 understanding I needed.

8 I -- I didn't -- since I'm assuming they're invalid and
9 infringed to do my analysis, I don't need a highly detailed
10 level, but I need to understand them and the technology, and
11 particularly how -- how it relates to other things.

12 Q. And just to be clear, I think I heard you say you were
13 assuming they're invalid and infringed. You meant valid and
14 infringed?

15 A. I'm sorry, I did, yes. I misspoke. I'm sorry.

16 Q. All right. What -- what did you consider, first of all,
17 in regard to the -- the flicker patent, the '884 patent?

18 A. Well, when I talked to Dr. Neikirk about that patent, he
19 explained to me that it had a very limited application. It
20 was -- basically it applied if you were taking a video in a
21 room that had old-fashioned fluorescent light and there was
22 some fluctuation in that light. So it didn't apply very
23 often and -- and that when it -- when you compared to it
24 other things going on in the -- in the technology, in these
25 sensors and processors, that a lot of other things were a

1 lot more important.

2 Q. What did you learn about the '029 preflash patent?

3 A. Well, for that patent, when I talked to -- to Mr.
4 Parulski about the preflash patent, he explained to me
5 that -- that it's only -- you typically only need it when
6 you're indoors under certain lighting conditions and that
7 there are other ways to get a -- a -- the lighting
8 appropriate for -- for pictures and that sort of thing.

9 It was a fairly minimal piece of the overall camera
10 quality that included a lot of different technologies. He
11 mentioned an individual sensor might have thousands of
12 technologies in it that -- dealing with resolution and pixel
13 size and a lot of other stuff.

14 Q. All right. And what did you learn about the '290
15 interface patent?

16 A. Well, on that one, Dr. Baker explained to me that --
17 that No. 1, the -- these were old technologies. The
18 single-ended interface was developed in the 1960s. The --
19 the differential interface was developed in the 1980s. And
20 this was just a -- a way to connect if you happened to need
21 backward compatibility in some way. This was one way to
22 achieve that. That there were also other technologies like
23 -- called parallel interface and that sort of thing where
24 you wouldn't need this technology.

25 He also explained to me that -- that in terms of any

1 impact on weight or battery life or anything of that nature,
2 it would be minimal, not even measurable.

3 Q. Now, you mentioned that you also considered some of the
4 testimony given at depositions by the patentees?

5 A. Yes, sir, I did.

6 Q. What did you consider in that regard?

7 A. Well, I read the depositions. There were -- there were
8 several patentees. I'm probably not going to remember all
9 the names, but Mr. Chung, Mr. Stark, Mr. Pine, Mr. Medwick,
10 and Mr. Devers, I believe, were the patentees, the
11 individuals who were deposed whose names are on the patents,
12 the people who originally created the patents.

13 And in their depositions they -- they talked about that
14 these were small contributions and that there were a lot of
15 things that go into a sensor -- a sensor processor.
16 Basically it's the same type of information, that this was
17 not the driving force in any of these things. It didn't
18 determine a demand for any of these things. These were
19 relatively small contributions.

20 Q. Did you consider any Samsung or other party market data
21 kind of information here?

22 A. I did. I looked at a lot of market data, and I also saw
23 the deposition of Mr. Hernandez, Jose Hernandez, who's a
24 marketing person at Samsung that I think you heard from, as
25 well.

1 And basically this is not the sort of thing that was
2 mentioned. When you talk about the -- say the camera, for
3 example, since that's most of the units -- I'm sorry, the
4 phone -- camera phone is most of the units, they talk about
5 a variety of things about those phones that have nothing to
6 do with the camera. And when they get to the camera, they
7 tend to talk more about pixels, the number of pixels, the
8 size of the pixels, those kinds of things that reflect the
9 camera resolution, as opposed to -- to what's involved in
10 these patents.

11 And I didn't find any references to any of these
12 particular technologies or the things they implicate.

13 Q. All right, sir. So in conclusion, how did the
14 information that you considered affect your evaluation of
15 these three factors?

16 XXXXXXXXXXXXX(Redacted pursuant to Court order)XXXXXXXXXXXXXXXXXX

17 XX

18 down. It seemed to be a more important technology. These
19 seem to be a small part of the overall picture, so that
20 would tend to have downward pressure on the royalty.

21 Q. All right, sir. Looking, again, at Exhibit 402 that's
22 up on the screen, what's the next Georgia-Pacific Factor
23 that you considered important here?

24 A. The next factor was Factor 12.

25 Q. What's Factor 12?

1 A. Factor 12 is -- is the portion of the -- of the selling
2 price that's customarily in this business, a pay for this
3 type of technology in terms of royalties.

4 Q. And what kind of evidence did you consider for Factor
5 12?

6 A. Well, a lot of the same things you consider for -- for
7 9, 10, and 13. Frankly, part of that gets to how much does
8 -- do -- how much does this technology really contribute to
9 the demand for these products from a market perspective, but
10 also I looked at the -- some of the rankings and grading and
11 that sort of thing that ESS has done when it evaluated the
12 patents itself.

13 Q. Rankings that ESS had applied itself?

14 A. Yes, sir, that's correct.

15 Q. Would you turn over to Defendants' Exhibit 160 -- 160?

16 A. Yes, sir.

17 Q. You have that?

18 A. I do, yes, sir.

19 Q. Sir, what is Exhibit 160?

20 A. Exhibit 160 is -- is an e-mail between some -- some
21 folks at ESS and some folks at Duff & Phelps, which is a
22 consulting company, basically where they lay out their
23 grading system that they've come up with for the patents.

24 Q. Using the A plusses, the As, the Bs, and the Cs?

25 A. That's correct, yes, sir.

1 Q. And if we turn to the next page, for example, I take it
2 we can see here a chart that basically lists the patents one
3 after another, and in the third column, is that the rating?

4 A. Yes, sir, it is.

5 Q. Did you find in this chart the ratings that ESS itself
6 had applied to its patents?

7 A. I did, yes, sir.

8 Q. Would you turn over to Page -- it's got two Bates
9 numbers, but the lower Bates number ends in 281 at the
10 bottom?

11 A. Yes, sir.

12 Q. And I'd ask you to look at the first, second, third,
13 fourth, fifth, sixth entry from the bottom.

14 MR. JENNER: Can we expand that?

15 Q. (By Mr. Jenner) Do you see the sixth entry up in the
16 second column from the right?

17 A. Yes, sir.

18 Q. That's one of the patents-in-suit?

19 A. It is, yes, sir.

20 Q. That's the '884 patent?

21 A. It is, yes.

22 Q. And what rating did ESS give to its A patent?

23 A. It gave -- it gave the '884 patent, the flicker patent,
24 an A.

25 Q. I think I answered -- answered my question. I'm sorry.

1 The question is what rating did it give it?

2 A. An A, yes, sir.

3 Q. If you turn over to the page with the Bates No. 1 --

4 sorry, the bottom Bates number is 283 at the bottom.

5 A. Yes, sir.

6 Q. And if you look at the bottom entry --

7 MR. JENNER: And can we expand that one?

8 Q. (By Mr. Jenner) Is that the '029 patent-in-suit?

9 A. Yes, sir, it is.

10 Q. What ranking did ESS itself give to the '029 patent?

11 A. It gave a C.

12 Q. And can you look one more time to the page that's got
13 the Bates number ending in 289 at the bottom, several pages
14 in?

15 A. Yes, sir.

16 Q. And if we could look at the fifth entry from the top on
17 this page?

18 A. Yes, sir.

19 Q. You see there, it's in the middle of the screen, it's
20 the '290 patent-in-suit?

21 A. Yes, sir.

22 Q. What rating did ESS give to that patent?

23 A. That one was also given a C.

24 Q. So just generally, what did you conclude from ESS's
25 rankings of its patents about the relative value of the

1 patents-in-suit?

2 A. Well, with regard to this particular ranking that was
3 done, Mr. Blair, in one of his depositions that I had read,
4 had indicated that they gave very little, if any, value to
5 Bs and Cs. In fact, even questioned whether they even kept
6 those patents up and kept them alive. So obviously, the two
7 Cs, that's the lowest grade in the scale. And so two of the
8 three patents received a C.

9 The third patent, they -- they regarded it as an A, so
10 it's the second of four -- there was A plus, A, B, C, and it
11 received an A.

12 Q. And just going back to the first page of the Exhibit
13 160 --

14 A. Yes, sir.

15 Q. -- what's the date of this document shown at the top?

16 A. This is April 27th, 2007.

17 Q. How does that compare with the date of the hypothetical
18 negotiation?

19 A. It's very, very close. The hypothetical negotiation
20 would have been around March or so of 2007.

21 Q. Now, would you turn to another exhibit in your binder,
22 it's Exhibit DX-894? Do you have that?

23 A. Yes, sir, I do. It took me a second.

24 Q. What's Exhibit 894?

25 A. Well, this is another e-mail from -- from Mr. Blair to

1 an individual at OmniVision in which he lists 10 of the
2 patents in the portfolio that he regarded as being essential
3 patents. I think his exact words were --

4 Q. I think if you look just above the list of the
5 patents --

6 A. Yes, sir.

7 Q. -- the first sentence of the second paragraph?

8 A. Yes, sir. He says: We believe it would be very
9 difficult to build a high quality sensor product without
10 utilizing some of the technologies on this list, especially
11 the first three patents listed.

12 Q. And he refers in the prior sentence to these patents as
13 what?

14 A. As fundamental patents. He called them fundamental
15 patents.

16 Q. Fundamental patents? And do you see in that grouping of
17 the ten patents any of the patents-in-suit?

18 THE COURT: One second. Don't speak directly into
19 the mic.

20 THE WITNESS: Okay. Okay.

21 THE COURT: That's a fine distance. When you get too
22 close --

23
24 THE WITNESS: Okay. I'm sorry. Thank you, Your
25 Honor.

1 THE COURT: Go ahead.

2 Q. (By Mr. Jenner) Now --

3 MR. JENNER: I'm sorry, Your Honor. Now I think from
4 where I'm standing, I've kind of lost the witness.

5 Q. (By Mr. Jenner) Could you say something again?

6 A. I said that -- that he called these patents the
7 fundamental patents.

8 Q. Okay.

9 A. In his opinion.

10 Q. Now, the author of this is Mr. Blair?

11 A. That's correct, yes.

12 Q. That's the same Mr. Blair we've heard about?

13 A. It is, yes, sir.

14 Q. Okay. And the date of this document, how does that
15 compare with the date of the hypothetical negotiation?

16 A. This document is dated October the 12th, 2008, so it's
17 about 18 months later, something like that.

18 Q. What did you consider, if anything, to be relevant about
19 these two exhibits, 160 and 894, in relation to Factor 12?

20 A. Well, this second one, 894, I guess the thing that
21 struck me the most is none of the three patents were on the
22 list. So Mr. Blair himself didn't regard any of these
23 patents as the ones that were fundamental or potentially
24 necessary to build a high-quality server.

25 And then in the other one, on the whole, the patents

1 got this very low rank. So I take those two together and it
2 basically tells me that there was not a great deal of value,
3 and hence, not a great deal of profit associated with these
4 patents.

5 Q. Is there any evidence you considered about what other
6 third parties thought about buying the portfolio of patents?

7 A. Yes, sir. I considered some of that evidence.

8 Q. What did you consider?

9 A. Well, there were discussions with -- with LG and Tessera
10 that I think you've heard some about before discussing
11 potentially buying the patents.

12 Q. And did they buy any of the patents?

13 A. They did not, no, sir.

14 Q. And what do you conclude from that in relation to Factor
15 12?

16 A. Well, there again, in one case, the patents were
17 evaluated, and it was found that they didn't think there was
18 much potential there. So, again, it just reinforced what I
19 had seen with the ranking system.

20 Q. All right.

21 MR. JENNER: Could we go back to Demonstrative 402,
22 please?

23 Q. (By Mr. Jenner) Sir, does this bring us to Factor 15 at
24 the bottom of the page?

25 A. Yes, sir, it does.

1 Q. What is Georgia-Pacific Factor 15?

2 A. Well, rather than read it, Georgia-Pacific Factor 15 is:
3 What would the royalty be, basically? It's where you put
4 all of the information together that you gain from the other
5 14 factors, along with the bargaining power of the two
6 parties, as that might come into play and say: Given all of
7 that information, what would be the likely outcome after
8 you've done all of this analysis.

9 Q. And part of the language says: An amount that a
10 licensor and a licensee would have agreed upon if the
11 parties had been reasonably and voluntarily trying to reach
12 an agreement, right?

13 A. That's correct, yes.

14 Q. Does that have anything to do with this concept we've
15 heard about of a hypothetical negotiation?

16 A. Yes, sir. An important concept within the hypothetical
17 negotiation, I think I mentioned briefly earlier, is
18 reasonableness.

19 In other words, the two parties are coming together to
20 reach an agreement. You may have been in a situation where
21 you tried to negotiate with somebody, and one side or the
22 other just would not be reasonable. That's not what this
23 is. This is both parties come together with the intent of
24 finding an agreement that's -- that's mutually beneficial.

25 Q. So how did you go -- how did you go about evaluating

Factor 15 in this case?

A. Well, as you know, I've looked at all the other factors, and what I had determined was that the best evidence I could find of what might happen was a negotiation at arm's length

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Q. Okay. So let's take this a piece at a time.

MR. JENNER: And, Your Honor, with apologies, I think this is another point where I have to ask the Court to seal the courtroom for more confidential information.

THE COURT: Related to both sides or --

MR. JENNER: I think, with apologies to my colleagues, we only have to kick out the people from Samsung right now, but we will need, at some point, to ask our colleagues across the aisle to leave. So right now, it's just Samsung.

THE COURT: Very good.

Samsung, are there any other people that are not here

from the case?

[illegible]

19

20

21

22

[illegible]

23

24

25

[illegible]

26

[illegible]

27

[illegible]

28

[illegible]

29

[illegible]

30

[illegible]

32

[illegible]

[illegible]

[illegible]

[illegible]

(Courtroom unsealed.)

A. I did, yes, sir.

1 A. Yes, sir, I did.

2 Q. In general, what did you conclude?

3 A. Well, we agreed on the basic structure; that it would be
4 a reasonable royalty; it would be a Georgia-Pacific
5 analysis; it would be a running royalty with some -- with a
6 certain amount per unit.

7 So in terms of the framework, we basically agreed on
8 the units so that there wasn't any -- any squabble there.
9 But I felt like the approach that she used was really
10 inappropriate and unrealistic for several reasons that
11 really exaggerated what the royalty should be.

12 Q. All right. Let me walk you through that.

13 MR. JENNER: Could we have up what has now been
14 marked as Demonstrative Exhibit 2018A?

15 Q. (By Mr. Jenner) You understand that this is a chart that
16 was used during my questions to Ms. Riley and that the
17 handwritten numbers are numbers that I placed on the chart;
18 they're not her numbers. You understand that?

19 A. Yes, sir, I do.

20 Q. Looking at this chart, are there some number of issues
21 that you have with Ms. Riley's approach?

22 A. Yeah. There are -- there are really four, maybe a 4A
23 and B on the last one, but really four issues that are
24 significant. There are some minor other things we disagree
25 on but four significant ones.

1 Q. All right. Would you start with the first issue and
2 tell us what it is?

3 A. Yes, sir.

4 The first issue is, if you notice at the very top of
5 this diagram here, the -- the profit numbers that came from
6 her analysis were arranged, depending on how many devices
7 and average price and that sort of thing or how many
8 components, anywhere from 27 cents to 74 cents was the
9 profit on -- on one of these units, okay? The total profit.

10 Now, the way she calculated that was to take the cost
11 information that we were provided and then -- and then go to
12 the -- and use the operating margin of the entire Sony
13 company world -- I'm sorry -- the entire Samsung company
14 worldwide of 11.8 percent to determine what that appropriate
15 level of profit should be.

16 Q. Do you have an opinion as to whether or not that's an
17 appropriate way to go about it?

18 A. Yes, sir, I do.

19 Q. What's your opinion?

20 A. I don't believe that's the appropriate way.

21 Q. And why is that?

22 A. Well, if you stop to think about it here, Sony
23 doesn't -- or Samsung doesn't sell sensors in the United
24 States, so we don't know how much profits Samsung makes on
25 the sensors, so how would we go about trying to figure out

1 what that would be?

2 And what she said was: Well, let's look at everything
3 Samsung does all over the world. Well, Samsung makes, as we
4 know, washing machines, televisions, phones, tablets, all
5 sorts of stuff that really bear little relationship to this
6 little sensor that goes inside the phones.

7 And so when we don't have the actual data, what we look
8 for, much like she did in some of her analysis, is something
9 we sometimes call a yardstick, sometimes call a benchmark;
10 that is, we try to figure out, if they were selling them,
11 how much margin would they make?

12 And the best way to do that is to see -- these are a
13 commodity. Basically, people buy them by the -- companies
14 buy them by the millions. How much are -- the companies
15 that make a lot of them and sell a lot of them, how much
16 money are they making off of them? Because that's the best
17 yardstick we could have for that.

18 An example I thought of last night when I was thinking
19 about this is, say you had a -- I'm going to make this up --
20 a 2013 Chevrolet sedan, and you were thinking about selling
21 it.

22 And you went to a used car lot to kind of see what
23 those are selling for right now, and they didn't have any
24 2013 Chevrolet sedans, but they had a 2013 Toyota sedan with
25 about the same features and size and a 2013 Ford sedan with

1 about the same features and size, and they had an old
2 beat-up 1996 Chevrolet pickup.

3 Her analysis would say, since Chevrolet made the
4 pickup, and Chevrolet made the sedan, let's look at the
5 pickup price to see what the sedan sells for. What I'm
6 saying is it makes more sense to -- let's look at other
7 sedans that compete with that sedan to see what the price
8 would be.

9 And what we're talking about here, the difference in a
10 beat-up pickup and a newer sedan is a lot less than the
11 difference in a little bitty chip in a refrigerator. I
12 mean, there's a lot of difference there. It's really an
13 apples and oranges thing. I'm not even sure one of them is
14 in the fruit bowl.

15 Q. Now, I believe Ms. Riley said a few times that it would
16 be improper to use OmniVision and Sony sensor sales because
17 neither OmniVision nor Sony is a party to the hypothetical
18 negotiation. Did you see that?

19 A. Yes, she did say that, yes, sir.

20 Q. Do you agree with that?

21 A. No, sir, I don't.

22 Q. Why?

23 A. Because what we're trying to get is how much money would
24 Sony -- would Samsung make on these things, and the best way
25 to determine that is the people who make the same product

1 who sell them by the millions, how much money are they
2 making? That's a much better indicator than how much money
3 Samsung makes on some completely different product.

4 Q. Now, did you -- did you actually do an analysis of this
5 kind in your own report?

6 A. I did, yes, sir.

7 Q. All right. Did you use the same Sony figures that I
8 used in making this chart?

9 A. I did not, no, sir. I used some different ones.

10 Q. So let's just show what that difference is.

11 MR. JENNER: Would you turn first to Exhibit --
12 Defendants' Demonstrative Exhibit 301.

13 Q. (By Mr. Jenner) Now, this is a chart that I showed Ms.
14 Riley, and there were two sets of calculations because
15 there's two sets of products that use image sensors. Do you
16 understand that?

17 A. Yes, sir, I do.

18 Q. And the right-hand one has to do with CMOS and
19 semiconductor devices?

20 A. Yes, sir.

21 Q. And the left one is -- is what? It's imaging products
22 and solutions?

23 A. Yes, sir.

24 Q. Do you understand that when I asked Ms. Riley questions
25 regarding the Sony sensor operating profit that I used the

1 right-hand side of this page?

2 A. Yes, sir, I do.

3 Q. Did you use the right-hand side of the page when you
4 tested this?

5 A. No, sir, I did not.

6 Q. What did you use?

7 A. I used the left-hand side.

8 Q. Is there any consequence to the fact that you used the
9 left-hand side?

10 A. Well, the profit in that division was a little bit
11 lower, and consequently, if I would have done the same thing
12 on the board you did, my numbers would have been lower than
13 the ones you wrote down.

14 Q. So what is the consequence of any of my having used a
15 higher profitability number on the right?

16 A. Well, the consequence is you came up with actually
17 higher profit numbers than you would have using the ones
18 that I used.

19 Q. Is that more favorable or less favorable to Imperium?

20 A. It's more favorable to Imperium.

21 MR. JENNER: Would you also look at Exhibit
22 Demonstrative 408.

23 Q. (By Mr. Jenner) Now, this is a chart calculating
24 average -- weighted average operating profit for OmniVision.
25 Do you see that?

1 A. Yes, sir, I do.

2 Q. Do you understand that the chart that I used covered a
3 period of 10 years?

4 A. Yes, sir.

5 Q. What's the significance of the one that I used covering
6 10 years?

7 A. Well, basically what you did was you used the same
8 period of time for OmniVision that Ms. Riley had used for --
9 for -- for Samsung when she made her calculations. So the
10 time periods were the same.

11 Q. Is that what you did?

12 A. It's not. When I -- and it's not her fault at all. But
13 when I first read her report that she submitted, I didn't
14 completely understand how she did her calculations.

15 Later, through some testimony and other things, I
16 figured it out. And so I had used a different calculation
17 in my report than what you used on the board.

18 Q. In fact, did you use a calculation for the most recent
19 three years as shown in 408?

20 A. I did, yes, sir.

21 Q. What's the consequence of having used the numbers you
22 used in 408 instead of the numbers I used doing my
23 questioning?

24 A. Well, again, my numbers were a little bit lower, so your
25 numbers, again, were more favorable to Samsung -- more

1 favorable to Imperium than mine were.

2 Q. Okay. So turning back to the chart, Exhibit 2018A, what
3 is the impact of using the actual operating profits of
4 sensor sales from sensor imaging companies like Sony and
5 OmniVision instead of using Samsung's worldwide corporate
6 profit on all kinds of products?

7 A. Well, both these companies, their profits are very, very
8 close together as you would expect, because they're selling
9 just this little commodity. And this goes -- if Sony were
10 actually -- if Samsung were actually selling these as
11 opposed to -- to just using them internally, then that's
12 about the markup they would expect.

13 It certainly wouldn't be the same as you would get when
14 you take what Samsung makes on tablets and phones and
15 refrigerators and televisions and dishwashers and a lot of
16 other stuff.

17 Q. And by applying the Sony and OmniVision numbers, does
18 that cause you to get higher or lower range of operating
19 profits?

20 A. Well, it brings the operation -- operating profit down
21 considerably.

22 Q. And is that similar to or dissimilar to what's shown on
23 2018A?

24 A. Well, that's exactly what's shown. If you make that
25 calculation, the 27 cents becomes 12 cents and the 74 cents

1 becomes 32-1/2 cents when you just bring those down by
2 that -- by that amount.

3 Q. Now, what's the second issue that you had with
4 Imperium's methodology?

5 A. Well, the second issue I had has to do with the arrow
6 over on the left that -- that goes down from -- that has the
7 document in the middle and goes down from the 27 cents down
8 to 2.7 cents. It's her lower bound number that's supposed
9 to represent the lowest amount that ESS would have accepted.

10 Q. And what's the problem there?

11 A. Well, there's a couple of problems. One of them is, if
12 you look at the agreement she based this on, this agreement
13 was an agreement between Imperium and ESS. When they --
14 when they -- when ESS assigned the patents to Imperium, they
15 said: What percentage of the revenue from the patents will
16 ESS get?

17 Now, at that time, same board of directors, same person
18 signing the documents, head guy, Mr. Blair, for both
19 parties. So it wasn't an arms-length transaction at all.
20 And basically, it was a -- it was people deciding how to
21 carve up money among themselves in large measure.

22 And so the -- the fact that the 10 percent number was
23 selected doesn't mean anything.

24 Q. Was there a manufacturing company who would be seeking a
25 license here like Samsung or Sony or BlackBerry?

1 A. No, sir. That's my second and even bigger problem. You
2 don't have a licensee here. What this says is: If we
3 license these patents, this is how we're going to carve up
4 the money we get.

5 It says nothing about, over here, what you might get
6 from somebody that actually wants to license the patents and
7 make a product with them. There's no licensee. There's no
8 manufacturing in this deal at all. So it's just a -- it's
9 just a number that -- that two interconnected companies
10 decided to divvy up among themselves.

11 Q. And what is the impact of that on the left-hand arrow
12 and the 2.7 cent number that it results from that's on the
13 bottom left?

14 A. Well, it just basically says that we don't have any
15 evidence to tell us what that number should be.

16 Q. Sir, what's the third issue that you had with this
17 methodology that Imperium used?

18 A. Well, my third issue has to do with the other arrow that
19 goes from the higher number, the 74 cents or 32.5, as
20 modified, down to the 13.5 cents by multiplying by 18.25
21 percent. That was how she characterized the maximum amount
22 that -- that Samsung might be willing to pay or a licensee
23 might be willing to pay.

24 Q. And what's the root of the problem with this part of the
25 analysis?

1 A. Well, again, several things on this one.

2 First of all, she gets this from two surveys she looked
3 at that were done by a company called InfoTrends. And I
4 think Dr. Benner talked about these some.

5 The point --

6 Q. Excuse me. Before you explain it, maybe it would help
7 to bring one up to look at.

8 Could you turn to PX-60?

9 A. 60? Yes, sir.

10 Q. And turn over to Page 18 so we have some context.

11 A. Yes.

12 Q. Is this where part of that 18.25 percent number comes
13 from?

14 A. Yes, sir, it is.

15 Q. And that's the Roe camera resolution toward the bottom
16 of the chart?

17 A. That's correct, yes, sir.

18 Q. All right. So I'm sorry I interrupted, but go ahead
19 with your explanation.

20 A. That's fine. I think that's helpful.

21 Well, if you look at the question that was asked here,
22 it asks people to name three features that would be the top
23 things that would influence their purchase of a phone.

24 Q. And that's at the top of the page?

25 A. Yes, sir. Yes, sir.

1 Q. What's the consequence of that?

2 A. Well, the consequence is that everybody names three
3 things, at least that's the first consequence. So you don't
4 have a hundred percent here. It's not 18 percent of a
5 hundred percent. It's really 18 percent out of 300 percent.

6 Now, they only reported the top 10 answers or so here,
7 but if you just look at the first few, you've got brand at
8 31 percent; display at 29.7 percent; operating system at
9 28.6 percent; and total package at 24.9 percent. Just the
10 first four, you're already over a hundred percent.

11 So this is not 18 percent of a hundred percent. This
12 is -- or 16 percent in this case, 16.8 percent of a hundred
13 percent; it's 16.8 percent of 300 percent. So that's one
14 issue.

15 Q. Okay. Yes.

16 A. A second issue is, if you think about the question, it
17 says: Name three things that would -- that would -- your
18 top three responses here, and this one came in eighth on
19 this one.

20 Camera resolution came in eighth place. I think it
21 came in sixth on the other one. She averaged two of them to
22 get the 18.25 percent. But if you think about it, it says
23 camera resolution. Now, these patents don't have anything
24 to do with camera resolution.

25 And there's been some suggestion that some people may

1 confuse camera resolution with overall image quality. Well,
2 that may be true. That may be true. But it's not just
3 these three patents that make -- certain camera resolution
4 involves pixel counts, pixel size, that type of thing.

5 It also involves a lot of other things. If people are
6 making a synonym for image quality, it's going to be
7 brightness, sharpness. It's going to be a whole lot of
8 things that are implicated by a whole lot of technologies.

9 So it's not that 18.5 percent of 300 percent even said
10 we're going to buy -- we picked this as one of our top three
11 because -- because we're -- because of these three patents.
12 It's because of everything that goes into image quality.
13 And there's a lot of things that go into image quality.

14 Q. Now, is it even image quality? It says camera
15 resolution.

16 A. Camera resolution. And with some -- some customers will
17 understand camera resolution. I think more and more people
18 are figuring out pixels now, it seems like. But some --
19 some -- some might make that a proxy for image quality.

20 Q. All right. So what --

21 MR. JENNER: Let's go back to 2018A.

22 Q. (By Mr. Jenner) What then in total is your view about
23 the appropriateness of using that 18.25 percent average from
24 the two InfoTrends studies?

25 A. Well, I think immediately we need to divide it by three

1 because it's not 18.25 percent of a hundred percent; it's
2 18.25 percent of 300 percent.

3 Q. Did you see that Mr. Benner testified about just a
4 couple of other represent -- exemplary studies where the
5 number relating to camera was as low as about 3 percent?

6 A. I did, yes, sir.

7 Q. All right. Does that affect your views in any way?

8 A. Well, it just reinforces more of what is shown when you
9 analyze these documents properly.

10 Q. Was there another issue that you had with this method of
11 analysis?

12 A. Yes, sir, there is. And as I say, this one kind of has
13 a 4A and 4B to it.

14 And I think just to keep things simple here for a
15 minute, let's pretend I didn't talk about the other three
16 for a minute, and let's just go back to the chart with --
17 with the 2.7 cents to the 13.5 cents because that math has
18 been done more precisely at this point.

19 That was what she described as the reference range in
20 which you would negotiate the royalty. And then she came up
21 with a -- with a number for each patent, and I'm not sure
22 how she did that, but -- but she came up with the 8 cents,
23 the 7 cents, and the 4 cents.

24 Well, what that range is, that's the range of profit
25 that's available, if you start at the top and then look at

1 the bargaining range that would be defined here. That's the
2 amount of profit that's available for, according to the
3 survey, camera resolution. Everything that goes into camera
4 resolution.

5 Q. Zoom?

6 A. Zoom, sure.

7 Q. White balance?

8 A. White balance, pixels.

9 Q. Color balance?

10 A. Color balance.

11 Q. Spherical aberration?

12 A. I don't know what that is, but, yes, I've seen that
13 word.

14 Q. In the patents-in-suit?

15 A. Absolutely, among other things.

16 Q. All right.

17 A. And so she -- and so not only has she said these
18 patents-in-suit are equivalent to image quality, she said
19 each one of them individually is. If you add up these three
20 numbers, she's come up with 19 cents in royalties just for
21 these three patents when the total amount available for
22 image quality is 13.5 cents even using her numbers.

23 In other words, these numbers don't reflect the fact
24 they haven't apportioned for all the other technology that
25 goes into camera resolution or image quality.

Q. Any other problems, or have we covered the gamut?

Q. All right.

THE COURT: Okay. We'll go ahead and seal the courtroom related to the Samsung people.

(Page 51, line 12 through page 58,

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THE COURT: Can we unseal the courtroom?

MR. JENNER: Yes. I'm sorry. Yes, we can.

THE COURT: I suspect that we probably -- not all of that needed to be sealed, so when you check the transcript --

MR. JENNER: Yes, certainly, Your Honor. I apologize. We were just being overcautious with all the --

THE COURT: No. I understand.

MR. JENNER: -- things that go on in the case.

THE COURT: No problem. But just go back and remark tomorrow morning or Monday for me.

MR. SALTMAN: May I proceed, Your Honor?

1 THE COURT: Yes. Go ahead.

2 CROSS-EXAMINATION

3 BY MR. SALTMAN:

4 Q. Good afternoon, Dr. Perryman.

5 A. Good afternoon.

6 Q. We met at your deposition?

7 A. Absolutely. Nice to see you again.

8 Q. It's nice to see you as well, sir.

9 I'd first like to start talking about the hypothetical
10 negotiation.

11 A. Yes, sir.

12 Q. ESS and Samsung would be the parties to that
13 negotiation, right?

14 A. That's correct, yes, sir.

15 Q. So OmniVision wouldn't be at that table, right?

16 A. Of course not, no.

17 Q. And Sony wouldn't be across from ESS negotiating a
18 license, right?

19 A. No, certainly not.

20 Q. And, Dr. Perryman, you issued a supplemental report in
21 this case on November 2nd of last year. Does that sound
22 right?

23 A. Yes, sir, I did.

24 Q. And in that report, you put forth the same rate that you
25 told the jury about today?

1 A. Yes, sir, that's correct.

2 Q. And so prior to issuing your report, you had come to
3 your damages conclusion in this case?

4 A. Well, we had come to the conclusions in terms of what
5 the appropriate rates would be. We got some new information
6 about some quantities and that sort of thing, so we updated
7 information about the number of quantities, and so we had to
8 recalculate some numbers.

9 Q. But in terms of your conclusion, you had come to it; you
10 just had to change the number of units, right?

11 A. With respect to the rates, that's correct, yes, sir.

12 Q. And for your report in this case, you didn't draft the
13 majority of that report, right, sir?

14 A. Well, we talked about this at my deposition. It depends
15 on how you define "draft." A lot of my staff worked on it
16 with me, and they -- they -- they wrote some sections of it.

17 A lot of -- there's a lot of pages in there that are
18 just an introduction to Samsung, an introduction to the
19 products, an introduction to the patents that I didn't
20 personally write.

21 There's other sections that describe some things about
22 the patent system in general that I wrote a while back, and
23 we edit them every time, and I didn't write them for this
24 report. So on the whole, I would say there's probably more
25 words written this time around by my staff than by me.

1 Q. And I think at your deposition, you said if you defined
2 it in terms of pages and paragraphs, Mr. Cox wrote the
3 majority of the report.

4 A. Well, I don't know if I would say the majority. I would
5 say he wrote more than I did.

6 Q. Okay. And I took your deposition on November 3rd of
7 last year?

8 A. That sounds right, yes, sir.

9 Q. So you actually issued your supplemental report the
10 night before I took your deposition?

11 A. Yes, sir. As soon as we got the quantities and could
12 crunch the numbers.

13 Q. And so prior to that deposition, again, you had come to
14 your conclusion aside from adjusting the number of units,
15 right?

16 A. We had come to a conclusion with regard to the royalty
17 rates, that's correct, yes, sir.

18 Q. And as you said during your direct testimony, you're
19 being -- your company is being compensated at 775 hours --
20 \$775 per hour for your time in this case, right?

21 A. Yes, sir, that's correct.

22 Q. And I believe you told the jury the proper damages here
23 was approximately \$2.5 million?

24 A. That's correct, yes, sir.

25 Q. And at the time of your deposition about three months

1 ago, you estimated that your firm had already billed Samsung
2 about a million dollars in fees on this case, right?

3 A. That was an estimate, yes, sir.

4 Q. And that number has only gone up since then?

5 A. It's gone up some, yes, sir.

6 Q. Now, you talked about the Georgia-Pacific Factors, the
7 15 factors, right, sir?

8 A. Yes, sir.

9 Q. And you put up a demonstrative showing which factors you
10 thought were most important for your analysis, right?

11 A. Yes, sir.

12 MR. SALTMAN: Mr. Rennick, could you please bring up
13 DDX-402, please?

14 Q. (By Mr. Saltman) And this was the demonstrative where
15 you highlighted -- the slide where you highlighted which
16 factors you thought were most important for your analysis,
17 right?

18 A. Yes, sir, that is correct.

19 Q. And you analyzed all of the factors; is that right?

20 A. Yes, sir.

21 Q. And I noticed that Factor 11 was not one of the factors
22 that you thought most important for your analysis, right?

23 A. (No response.)

24 Q. It's shaded out, sir?

25 A. Yes, sir. We did not find much evidence with regard to

1 that at all that significant use could be made of the
2 technology.

3 Q. And you didn't find any evidence probative of the value
4 of that use that was relevant for your analysis, right?

5 A. Well, that kind of got -- and a lot of these factors
6 overlap. That kind of gets subsumed into some others.
7 Basically we found, and I think I talked about it in Factor
8 12, that the value of the use was -- was minimal, if any.

9 Q. And so you didn't discuss Factor 11 with the jury today,
10 correct?

11 A. Not separately. All the relevant information was
12 discussed, but I didn't pull it out separately and repeat
13 it, no, sir.

14 MR. SALTMAN: Thank you, Mr. Rennick.

15 Q. (By Mr. Saltman) Now, I understand, sir, you had a prior
16 commitment earlier this week. But you weren't in the
17 courtroom for Mr. Capone's testimony, right?

18 A. That's correct. I had to read the transcript.

19 Q. And you weren't here for Dr. Benner's testimony either?

20 A. No. I had to read Dr. Benner's as well, that's correct.

21 Q. And you weren't here when Mr. Jeon's testimony was
22 played for the jury, right?

23 A. I don't recall if I was or not. I -- if it was one of
24 those days I was out, then if it was played one of those
25 days, then I was not here for that. I read it, regardless.

1 Q. And you weren't -- as you stated, you weren't in the
2 courtroom during Ms. Riley's testimony, right?

3 A. That's correct, yes, sir.

4 Q. So you didn't see the slides that went along with her
5 presentation. You didn't see -- as she testified, you
6 didn't see those slides, right?

7 A. I did not see the slides, that is correct.

8 Q. Now, Dr. Perryman, I'd like to talk about some of the
9 things you looked at in preparing your report.

10 A. Yes, sir.

11 Q. Before coming to your damages conclusion, you did not
12 speak with anyone at Samsung regarding the marketing of the
13 products, the accused products, right?

14 A. I'm sorry? Regarding what?

15 Q. The marketing of accused products.

16 A. I did not talk with anyone at Samsung, that is correct.
17 I read some depositions and had some information, but I did
18 not have to talk to anyone.

19 Q. So you didn't speak to anyone at Samsung about
20 licensing, for example, right?

21 A. Oh, I didn't need to, no, sir.

22 Q. Now, I'd like to talk to you about some of those Samsung
23 employees. At your deposition, you didn't know who Hae Sun
24 Lee was, right?

25 A. That's right. I didn't recall at the time, that is

1 correct.

2 Q. You also didn't know who Jaehun Lim was, right?

3 A. That's right. And some of those I had not -- I had not
4 read their deposition because, if they were in the technical
5 side of the case, because I start with the assumption that
6 they're valid and infringed, there's some of these folks
7 that the information they bring to bear is important in this
8 case potentially, but because I'm starting out with assuming
9 that they're valid and infringed, it's not as important to
10 me.

11 Q. Are you aware some of those deponents said that image
12 quality was very important?

13 A. Oh, it wouldn't surprise me. I think -- I think image
14 quality is a significant factor.

15 Q. And that Samsung has approximately 60 employees working
16 on image quality on the accused products?

17 A. I didn't know that number, but it certainly wouldn't
18 surprise me.

19 Q. And at your deposition, you didn't know who Jun Bang
20 was -- Jun Bang was, right?

21 A. That's correct. I had cited his -- some of his
22 deposition, but I did not recall the name at the time.

23 Normally you hear that kind of stuff with the report in
24 front of you. You just kept asking me if I remembered
25 things, and I -- and that's now how I normally do it in a

1 deposition. But I did not recall, that is correct.

2 Q. And you didn't recall who Jongsoo Lee was at your
3 deposition?

4 A. That's correct.

5 Q. And you didn't recall who Daniel Shim was at your
6 deposition?

7 A. That is correct.

8 Q. And you didn't recall who Sean Diaz was at your
9 deposition?

10 A. The financial guy, yeah, I could not -- I did not recall
11 his name, that's correct.

12 Q. And you thought Stephanie Ebbeler may have been involved
13 in the grading of ESS's patents, right?

14 A. Right. And, in fact, she's a marketing person, yes,
15 sir.

16 Q. She's a marketing person at Samsung, right?

17 A. Correct. Yes, sir.

18 Q. And you thought Daejin Jeon was the chief engineer
19 involved with the accused technologies, right?

20 A. Right. I knew he was on the engineering side of things
21 because his deposition was one I had spent a fair amount of
22 time with. I didn't know his title.

23 Q. So you said you spent a fair amount of time reviewing
24 Mr. Jeon's deposition?

25 A. The parts that were relevant to my analysis, yes, sir.

1 Q. And he was Samsung's licensing witness, right?

2 A. I believe so, yes, sir.

3 Q. And at the time you came to your damage conclusion, you
4 knew that flicker affected image quality, right, sir?

5 A. I knew that -- I -- I understood that -- that flicker
6 was an issue, yes, sir.

7 Q. But aside from that, you did not have a precise
8 understanding of what flicker was, right?

9 A. That's correct. Yes, sir.

10 Q. And so you didn't know what a picture or video would
11 look like if it did not have the ability to reduce flicker,
12 right?

13 A. That's correct.

14 Q. And, similarly, when you came to your damage conclusion,
15 you didn't know what a picture would look like if it did not
16 use preflash, right?

17 A. That's correct. I had been told the relative importance
18 by the -- by the experts, and that's what I needed to know
19 for my analysis, that's correct.

20 Q. But you didn't know what a picture would look like if it
21 didn't use the accused technology, right?

22 A. That -- yes, sir. As I said, I just -- I just had been
23 told the relative importance of that relative to all these
24 other things that Mr. Jenner mentioned a moment ago.

25 Q. And you didn't look at any of the accused products as

1 part of your work on this case, right?

2 A. Well, I mean, I've seen the products. I did not examine
3 them in some way. I -- that's not what I do. I'm not an
4 engineer.

5 Q. And you know from examining the patents that they each
6 cover a different aspect of image sensors and processors,
7 right?

8 A. I do that -- know that, yes, sir.

9 Q. And I believe during your direct testimony, you talked
10 about a number of components of an image sensor that you
11 referenced back to the inventors of the patents, right?

12 A. Correct. Yes, sir.

13 Q. And you also discussed those components in your expert
14 report, right?

15 A. I did, yes, sir.

16 Q. Do you know which of those components relate to the
17 patents in this case?

18 A. I'm sorry. Say that again.

19 Q. You do know which of those components relate to the
20 patents in this case, right?

21 A. Which components? I'm sorry.

22 Q. The ones you referenced in your direct testimony when
23 you were talking about the inventors.

24 A. Well, my understanding from what the inventors said was
25 that -- that the technology that they were inventing was

1 only a small part of -- of the -- of the many things that
2 went into sensors and image quality.

3 Q. And do you recall at your deposition, I asked about the
4 components of those CMOS image sensors that were discussed
5 in your report? Do you recall our discussion on that?

6 A. I think so, yes, sir.

7 Q. And I asked, which of those components relate to the
8 patents-in-suit in this case, and you said you didn't know?

9 A. Well, again, I'm not an engineering person. That's the
10 kind of information you would get from the gentlemen we've
11 already heard from.

12 Q. Now, let's talk about the non-infringing alternatives
13 that you've discussed in your direct testimony.

14 A. Yes, sir.

15 Q. Now, for something to be a non-infringing alternative,
16 it has to be available at or near the time of the
17 hypothetical negotiation?

18 A. Yeah. I didn't discuss them much at all in my direct
19 testimony, but it has -- my understanding, it has to be
20 available or very obvious technology at the time.

21 Q. And it has to be non-infringing, right?

22 A. And it has to be non-infringing, yes.

23 Q. Has to be acceptable to Samsung and its customers?

24 A. You would certainly think so, yes, sir.

25 Q. It has to be a reasonable cost?

1 A. Again, you would certainly think so.

2 Q. And for the non-infringing alternatives for the preflash
3 patent that you considered, you don't know if they would
4 apply to all the asserted claims, right?

5 A. I mean, again, those are the kind of questions that the
6 technical experts would address and have addressed. I mean,
7 I -- that's not the sort of thing I would know about.

8 Q. Mr. Parulski didn't tell us the answer to that question
9 during his testimony, did he?

10 A. I don't recall everything in -- in his testimony. And,
11 again, I -- I really put very little focus on the
12 non-infringing alternatives, but I don't recall how much he
13 talked about it.

14 Q. And you're aware that Mr. Parulski never talked to a
15 single Samsung employee about the non-infringing
16 alternatives to that patent, right?

17 A. I can't think why he would, but, no, I'm not aware that
18 he did, no, sir.

19 Q. And, similarly, for the anti-flicker patent, you don't
20 know if they would apply to all the asserted claims of that
21 patent, right?

22 A. Well, again, that would be the type of issue that Dr.
23 Neikirk would address.

24 Q. And Dr. Neikirk didn't discuss any non-infringing
25 alternatives during his testimony, did he?

1 A. I thought I remembered him talking about some, but if
2 you -- but I'll accept your representation on that.

3 Q. Thank you, sir.

4 And, similarly, for the non-infringing alternatives for
5 the interface patent, you don't know whether they apply to
6 all the asserted claims of that patent, right?

7 A. Oh, again, no, I wouldn't begin to know that, no, sir.

8 Q. And Dr. Baker didn't discuss that during his testimony,
9 did he?

10 A. I don't believe he did, no, sir.

11 Q. And for each of the patents, you're not certain if the
12 non-infringing alternatives would apply to each of the
13 accused products, right?

14 A. Well, again, no, those are all technical issues that
15 someone like Dr. Baker or Mr. Parulski or Dr. Neikirk would
16 discuss.

17 Q. And those individuals didn't discuss that in their
18 testimony in this --

19 A. I don't believe they did, no, sir.

20 Q. And as we talked about, a non-infringing alternative has
21 to be acceptable to Samsung -- Samsung's customers, right,
22 sir?

23 A. Obviously, Samsung wants to please its customers.

24 Q. But you haven't seen any evidence that Samsung's
25 customers would find these non-infringing alternatives

1 acceptable, right?

2 A. Well, I don't know what evidence you would see of that,
3 in that I know there's a dispute over whether the patents
4 are even infringed or not. So I don't -- I don't know what
5 evidence you could see about that, but I'm not aware of
6 anything, no, sir.

7 Q. And a non-infringing alternative has to have minimal
8 cost, right, sir, or reasonable cost?

9 A. Yeah. Again, it has to be feasible within the
10 marketplace. It's a very competitive marketplace.

11 Q. And for the non-infringing alternatives you discussed
12 for each of the patents, you don't know the cost of any of
13 them, right?

14 A. Oh, no, no. I would not know that at all, no, sir.

15 Q. And the technical experts didn't discuss that during
16 their testimony, did they?

17 A. I don't believe so, and I don't think that they
18 discussed it when I spoke with them about these issues.

19 Q. And when a customer buys a smartphone, they expect to
20 see a camera, right, sir?

21 A. I think by and large today, when people buy a
22 smartphone, that there's a camera in it, yes, sir.

23 Q. And I think when I talked to you at your deposition, I
24 asked about when a customer thinks about the camera feature.
25 It's your opinion that customers care most about image

1 quality, battery life, and ease of use. That's what you
2 told me, right, sir?

3 A. That was -- could well have been. Again, I'm -- I'm not
4 reading from it, but if you are, that's great. That's
5 something --

6 Q. You have no reason to disagree with what I just said,
7 right, sir?

8 A. That -- that -- if that's what I said, that sounds
9 great. I like that answer.

10 Q. Samsung features the camera in the marketing of the
11 accused products, right, sir?

12 A. Yes, sir.

13 Q. And that's because the camera feature in the phone is of
14 interest to its customers, right?

15 A. Among many other things, certainly, it is, yes, sir.

16 Q. And Samsung also markets the image quality of its
17 cameras in its smartphones, right?

18 A. Certainly. All the competitors do.

19 Q. And that's because, as you, I think, said during your
20 direct testimony, for some customers, image quality plays a
21 role in their -- in their decision?

22 A. Right. The -- the -- the evidence indicates that for
23 some percentage, it does, yes, sir.

24 Q. And when a customer takes a picture with their
25 smartphone, they expect a certain minimum level of image

1 quality, right?

2 A. I would think most customers do. As we talked about in
3 my deposition, I'm kind of one of those guys that just kind
4 of wants to remember the moment. I just point and click,
5 and mine are out of focus and everything else, but I would
6 think a lot of people do, yes, sir.

7 Q. And I think you said during your direct testimony that
8 certain customers equate resolution with image quality,
9 right?

10 A. I think that's a reasonable thing to assume. There has
11 been some literature to suggest that.

12 Q. And you said, I think, as time has gone on, customers
13 have gotten more sophisticated about that issue, right?

14 A. Again, there seems to be some evidence to support that,
15 yes, sir.

16 Q. Back in, say, 2007, more customers would have equated
17 camera resolution with image quality, right?

18 A. You know, I haven't seen a trend or anything, but that's
19 certainly possible and certainly makes sense.

20 Q. Now, you talked about a number of Imperium settlement
21 agreements in this case, right, sir?

22 A. Yes, sir.

23 Q. And, Dr. Perryman, you talked about specifically the
24 Apple and the Sony agreements, correct?

25 A. Those are ones I focused in on, among the others, yes,

1 sir.

2 Q. You looked at all of them, but those are the two you
3 really focused on?

4 A. In terms of a check on things, once I had finished my
5 analysis, yes, sir.

6 Q. And I think you stated that you couldn't use those
7 settlements to affirmatively determine what a reasonable
8 royalty would be in this case?

9 A. That's correct, yes, sir.

10 Q. And that's because there's risk associated in litigation
11 to both parties?

12 A. That was one of the reasons. There are also the lump
13 sums, you know, one payment for all the usage for the entire
14 life of the patents worldwide, multiple patents, a lot of
15 other reasons, but that was certainly one of them, yes, sir.

16 Q. And another one is there's no agreement about validity
17 and infringement, right?

18 A. Absolutely. In many cases, when they settle a case, and
19 I think these in particular, that was the case, yes, sir.

20 Q. And for a license -- the hypothetical license here
21 between ESS and Samsung, validity and infringement would not
22 be in dispute, right?

23 A. That's right. When you sit down -- as we said at the
24 very beginning, when you sit down at the hypothetical
25 negotiation table, you assume that the patents are valid and

1 infringed, and the parties are going to act reasonably to
2 reach an agreement, that's correct.

3 Q. And during a settlement negotiation or any real-world
4 negotiation, the parties don't have perfect information,
5 right?

6 A. That's right. In a hypothetical negotiation, we
7 basically assume -- an analogy I've heard very often and Ms.
8 Riley used, the cards are face up. Everybody has the same
9 information to work from, and that's not always the case in
10 real life.

11 Q. And you're in agreement with Ms. Riley that the
12 settlement agreements in the hypothetical are fundamentally
13 different, right?

14 A. Yes, sir, they are. I think we're pretty much in
15 agreement on that.

16 Q. And the settlement agreements here took place about six
17 years after the hypothetical negotiation, right?

18 A. That's correct, yes, sir.

19 Q. And as things happened further away from the
20 hypothetical negotiation, they become less relevant, right?

21 A. They can become less relevant. It's certainly something
22 you want to take a look at and analyze. They can become
23 less relevant, but I didn't think the settlement agreements
24 were particularly relevant to what a reasonable royalty
25 would be in any case.

1 Q. And for each of those settlements, you don't know how --
2 any knowledge -- you don't -- strike that. Excuse me.

3 For each of the settlements, you don't have any
4 knowledge of XXXX(Redacted)XXXXXX under that -- those
5 agreements, right?

6 A. No -- no idea whatsoever. It's just a -- it's a lump
7 sum for all the units.

8 Q. And that includes XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX for Apple,
9 right?

10 A. That's correct.

11 Q. You don't have XX

12 A. That is correct.

13 Q. And Samsung actually sells far more smartphones
14 worldwide than anyone else, right?

15 A. Worldwide, that's correct, yes, sir. This is a license
16 for U.S. usage, but worldwide, that's correct.

17 Q. And, for example, on the Apple license, there's no
18 information about XX
19 XXXXXXXXX, right?

20 A. That's exactly right, yes, sir.

21 Q. And for the Apple agreement, you kind of took each
22 patent as a typical patent, and then you adjusted based on
23 the grading summary you talked about, right?

24 A. Well, that was one of the things I looked at. And as I
25 said, there were a lot of reasons why that agreement

1 didn't -- didn't work, and you pointed out several of them
2 again. But that was certainly one of them, yes, sir.

3 Q. And aside from the three patents in this case, you never
4 looked at any of the other Imperium patents, right?

5 A. As far as just reading the patent documents themselves,
6 no, sir. I would have no reason to do that.

7 Q. So you don't know how each of them are different from
8 one another, do you?

9 A. Other than seeing just the very brief descriptions of
10 them in the table where they were all ranked A plus, A, B,
11 and C, I don't, no, sir.

12 Q. And you don't know which of Imperium's patents --
13 Imperium's patents Apple is using and which ones it isn't,
14 right?

15 A. I -- I don't know if it's using any of them or not. I
16 really don't.

17 Q. I think on your deposition, you said you did not take a
18 great deal of time looking at the Apple agreement, right,
19 sir?

20 A. Well, I didn't have to take a great deal of time. It's
21 a fairly short, straightforward agreement, yes, sir.

22 Q. Another agreement we've heard about is the Samsung
23 Techwin agreement, right?

24 A. Correct, yes, sir.

25 Q. XXX

1 right?

2 A. That's correct, yes, sir.

3 (Page 79, lines 3 through 8 redacted

4 (by order of the Court.

5 XX

6 XX

7 XX

8 XX

9 Q. So that was the only asserted patent in that case,

10 right?

11 A. I believe so, yes, sir.

12 Q. And then Imperium offered to license the remaining

13 portion of the portfolio for an additional 50 percent,

14 right?

15 A. Correct, yes, sir.

16 Q. And I think during your direct testimony you said Ms.

17 Riley attributed two-thirds of the value of the portfolio to

18 just the anti-flicker patent, right?

19 A. That's correct, yes, sir.

20 Q. But during her testimony, she talked about the asserted

21 patents versus non-asserted patents, right?

22 A. She did, yes, sir.

23 Q. So she's talking about, for example, the three patents

24 in this case versus the rest of the portfolio, right?

25 A. Well, not really, with all due respect, because she was

1 doing that when she had a comparison of -- of the Chronicle
2 license with -- with her conclusion.

3 And the Chronicle license, the way she did her
4 calculation was she said there's the '884 patent and there
5 was 80 other patents in that -- in that agreement and eight
6 other applications. She said and all the others would be
7 one-third.

8 So -- so, with all due respect, the way she treated it,
9 she treated it as if it were the entire portfolio.

10 Q. But she was focused on the asserted patents because
11 that is -- those are the patents that Imperium, at least,
12 has done research and thinks that the licensee is
13 infringing, right?

14 A. Well, I think it's very fair to say that her analysis,
15 by and large, was focused on the asserted patents, but that
16 particular reasonableness check where she used that
17 two-thirds number, the only place that intersects with any
18 patents -- because it didn't in the LG thing at all -- the
19 only place it intersected with any patents at all was -- was
20 in that analysis of the Chronicle license, which was a total
21 portfolio of all the patents.

22 Q. Dr. Perryman, you were a professor at Baylor for
23 17 years, right?

24 A. That's correct, yes, sir.

25 Q. And during -- I think you testified, during nine of

1 those years, you also worked at the Perryman Group?

2 A. Yes, that would be correct, yes, sir. I had to do some
3 quick math there.

4 Q. And we talked about at your deposition, when you used to
5 give out grades, you used to give As and Bs and Cs, right?

6 A. We did, yes, sir.

7 Q. And you said for a student to get an A, they'd have to
8 get a 90, right?

9 A. I usually curve mine pretty good. I was nice. But --
10 but that was the grading system at Baylor. 90 was an A, 80
11 was a B, 70 was a C. You know, an A was four grade points,
12 a B was three grade points, and so forth, yes, sir.

13 Q. So when someone was getting a grade, a C was worth a 70,
14 but as you discussed on your analysis, a C was less than 30
15 percent, right?

16 A. Well, again, those are totally unrelated. First of all,
17 the only grades in this system were A plus, A, B, and C.
18 There were no Ds and Fs. In the university, we have Ds and
19 Fs. And so -- and so basically you've got the bottom grade
20 versus the top grade.

21 And grades in the university versus how these patents
22 were graded, and in particular, what Mr. Blair said about
23 these patents are just about -- I can't think of two things
24 any more unrelated than that.

25 Q. But for your analysis, you gave any patent that was a C

1 a 30 percent, right?

2 A. Based on the analysis that I did and described here,
3 that's correct, yes, sir.

4 Q. And you used that ESS report card to adjust your rates,
5 right?

6 A. Yes, sir.

7 MR. SALTMAN: Mr. Rennick, could you please put up
8 PX-45? Thank you, sir.

9 Q. (By Mr. Saltman) And this is the grading summary, the
10 report card you talked about during your direct testimony?

11 A. Yes, sir, it is.

12 Q. You don't know who at ESS created this document, right?

13 A. This e-mail or the -- or the --

14 Q. The actual grading summary.

15 A. The actual grading summary? No. Some of the testimony
16 indicated that a Ms. Moore might have been involved in it,
17 but I don't know exactly who did the grading.

18 Q. Do you know when Ms. Moore got involved with ESS
19 Imperium?

20 A. No, I don't. I honestly don't.

21 Q. You don't know that it was after April of 2007?

22 A. That could well be. I just remember some reference in
23 testimony to her evaluating patents. I don't know if it was
24 the same evaluation or a different one. But I don't have
25 internal knowledge of who internally at ESS would have done

1 this.

2 Q. And so you discussed Mr. Blair's deposition testimony
3 about this document, right?

4 A. I did, yes, sir.

5 Q. Are you aware that Samsung has not shown the jury any of
6 Mr. Blair's deposition testimony?

7 A. I believe that's correct, yes, sir.

8 Q. And when asked about this document at his first
9 deposition, Mr. Blair said that he had never seen it before,
10 right?

11 A. I believe he did say that, yes, sir.

12 Q. And you don't know that any detail of what bases was
13 used to grade these patents, right, sir?

14 A. That's right. No.

15 As I mentioned, Mr. Blair did say at one point that he
16 wasn't even sure it was worth keeping the B and C patents
17 active, that he thought they had very little value.

18 Q. But Mr. Blair didn't know any of the details of how this
19 grading was done, right?

20 A. Not -- no, sir, I don't think he did.

21 MR. SALTMAN: Thank you, Mr. Rennick.

22 Q. (By Mr. Saltman) And, Dr. Perryman, you're aware Ms.
23 Riley looked at the cost of the image sensors in the accused
24 products, right?

25 A. Yes, sir.

1 Q. And she looked at the cost of the image processors in
2 the accused products, right?

3 A. Yes, sir.

4 Q. And the parties would have considered those prices
5 during the hypothetical negotiation, right?

6 A. I would think so, yes, sir.

7 Q. And you've not seen any data about what profits Samsung
8 actually attributes to the image sensors and processors in
9 this case, right?

10 A. I haven't. I've seen very good market data to suggest
11 what it would be, but I haven't -- I haven't seen --
12 actually seen it because they don't sell them in the United
13 States, so there is no sales data we can calculate that
14 from.

15 Q. They do sell them outside the United States, right?

16 A. Yes, sir, I believe they do.

17 Q. And those figures Ms. Riley used were worldwide sales,
18 right?

19 A. Well, the figure Ms. Riley used were worldwide sales of
20 everything Samsung does. I didn't see any figures that I
21 would -- I don't think Samsung does their accounting in such
22 a way we could sort out the -- just the processors they sell
23 worldwide.

24 Q. But image sensors and processors would be included in
25 that 11.8 percent, right, sir?

1 A. Yeah. They would be -- those little processors would be
2 included, along with refrigerators and televisions and
3 phones and tablets and a lot of other stuff, yes, sir.

4 Q. And you understand it's Samsung's contention that they
5 don't infringe the patents-in-suit in this case?

6 A. Oh, absolutely, yes, sir. I do understand that. And
7 that's just an assumption that I'm required to make, that
8 they do, to do my analysis. I am in no way saying that
9 Samsung infringes these patents.

10 Q. And you haven't seen any evidence of how much it cost
11 Samsung to develop the accused technology in the image
12 sensors and processors, right?

13 A. I have not. I know they have a lot of image technology
14 and a lot of patents in that field, but as far as the actual
15 cost of developing that, I don't know.

16 Q. And you don't know if they have any patents related to
17 flicker, right, sir?

18 A. I don't know off the top of my head, no, sir, I don't.

19 Q. And you don't know if they have any patents related to
20 preflash?

21 A. I don't know, no, sir.

22 Q. And you don't know if they have any patents related to
23 interfaces either, right, sir?

24 A. I wouldn't need to know any of that for my analysis, no,
25 sir.

Q. And if Samsung offered a phone that did not include a feature a customer is expecting to see, Samsung would have to lower the price of that phone, right, sir?

MR. SALTMAN: Your Honor, at this point, I would request to seal the courtroom. I'm just going to be getting into Samsung confidential information.

MR. SALTMAN: Thank you, Your Honor.

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THE COURT: All right. Can we go ahead and unseal
the courtroom?

MR. JENNER: As far as I'm concerned, we can.

MR. SALTMAN: Yes.

(Courtroom unsealed.)

THE COURT: Additional questions?

MR. JENNER: Just a few, Your Honor, yes.

May I proceed, Your Honor?

THE COURT: Yes. Go ahead.

REDIRECT EXAMINATION

BY MR. JENNER:

Q. A few things I'd like to clarify.

A. Certainly.

Q. First of all, counsel asked you a number of questions at
the outset about the Georgia-Pacific Factors.

A. Yes, sir.

Q. I'd just like to be clear. Even though you talked today

1 about the yellow highlighted factors that you considered to
2 be most important in your final analysis, did you or did you
3 not consider all of the Georgia-Pacific Factors?

4 A. Oh, absolutely. I considered all of them. And in the
5 report I provided to the -- to the Plaintiffs, I discussed
6 each one of them individually.

7 Q. All 15; is that correct?

8 A. Oh, absolutely, yes, sir.

9 Q. Counsel asked you a lot of questions about
10 non-infringing alternatives.

11 A. Yes, sir.

12 Q. Did you, in fact, rely today much on non-infringing
13 alternatives in your testimony?

14 A. Oh, not at all. No. I was very surprised by that.

15 Q. All right. Counsel asked you some questions about
16 worldwide sales as between Apple and Samsung, and I'd just
17 like to make sure it's clear.

18 What are the relative sales qualitatively between
19 Samsung and Apple in the United States?

20 A. In the United States, Apple sells roughly 50 percent
21 more -- has roughly 50 percent more market share than
22 Samsung. One of them is about 43, 44 percent, is Apple, and
23 Samsung is around 27 right now. So half again as much.

24 Q. And is it the U.S. sales that you considered in your
25 analysis or the worldwide sales?

A. Oh, it's the U.S. sales. Again, we're talking about U.S. patents here, which apply to products in the United States.

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THE COURT: So unseal the courtroom.

(Courtroom unsealed.)

THE COURT: And, ladies and gentlemen, if you have a question, go ahead and send that. And as soon as we finish this portion, we'll take a break. I know you're probably wanting a break.

(Pause in proceedings.)

THE COURT: Can I have counsel approach?

(Off the record bench conference.)

THE COURT: Okay. Dr. Perryman, I allow the jury to ask questions of live witnesses.

THE WITNESS: Yes, sir.

THE COURT: And so -- and the question is, if you can

1 answer this question, what was the selling price for a
2 smartphone camera phone in early 2007 comparable to a Samsung
3 camera phone, if you know?

4 A. You know, I honestly don't know what the relative
5 selling prices were at that time. They are a lot less than
6 they are now, I think, but I don't know what the -- what
7 the -- what the prices of phones were at that point in time.

8 THE COURT: Okay. Thank you.

9 I don't know if there's any follow-up to that question?

10 MR. JENNER: Nothing here, Your Honor.

11 MR. SALTMAN: Nothing, Your Honor.

12 THE COURT: You may step down.

13 THE WITNESS: Thank you, Your Honor.

14 THE COURT: Ladies and gentlemen, we're going to go
15 ahead and take a break. We're going to take about 20 minutes
16 this time, because I'm going to stay on the bench. I have to
17 do a criminal matter before I get to take -- my staff and I get
18 to take a break, but...

19 So we'll take 20 minutes and come back. Again, don't
20 talk about the case with yourselves or with anybody else,
21 and we'll continue this afternoon.

22 Thank you.

23 COURT SECURITY OFFICER: All rise.

24 (Jury out.)

25 (Recess.)

1 COURT SECURITY OFFICER: All rise.

2 THE COURT: Okay. Go ahead and bring the jury in.

3 MR. HARNETT: Your Honor, one moment. I understand
4 that an instruction is going to be given at this time. Just to
5 make sure there's no confusion on the record, we -- we need to
6 formally object to what you're doing.

7 THE COURT: I understand. It's overruled. After you
8 rest -- I'll let you rest in front of the jury first.

9 COURT SECURITY OFFICER: All rise for the jury.

10 (Jury in.)

11 THE COURT: Go ahead and be seated, please.

12 Okay. What says Samsung?

13 MR. HARNETT: Samsung rests.

14 THE COURT: Thank you. And before I call upon
15 Imperium to do the rebuttal, I want to give you an instruction.

16 On Tuesday, Imperium offered Mr. Bang's and Mr. Lee's
17 testimony by way of their videotaped depositions. Mr. Bang
18 testified under oath that Samsung discontinued discussions
19 with Imperium regarding Imperium's patent portfolio, did not
20 perform an analysis of Imperium's patents after 2011.

21 Mr. Bang further testified that he did not review any
22 pleadings in the first Imperium case against the seven
23 smartphone Defendants, and he did not monitor that
24 particular Imperium litigation.

25 Mr. Lee testified under oath that in 2011, Samsung

1 decided to drop its pursuit of Imperium's patents.

2 Mr. Lee further testified Samsung's business units had
3 determined that Imperium's patents were not worth acquiring.

4 At 2:19 a.m. yesterday morning, Samsung produced for
5 the first time previously undisclosed documents regarding
6 specific facts within the personal knowledge of Mr. Bang and
7 Mr. Lee, in violation of this Court's rules regarding the
8 disclosure of evidence.

9 This evidence contradicts the sworn testimony of Mr.
10 Bang and Mr. Lee and indicates that the testimony that Mr.
11 Bang and Mr. Lee gave about Samsung's discussion with
12 Imperium and its analysis of Imperium's patents was false
13 and therefore not worthy of belief.

14 Accordingly, I will strike these portions of Mr. Bang's
15 and Mr. Lee's testimony from the record and instruct you to
16 disregard the testimony in its entirety.

17 What says Imperium regarding rebuttal?

18 MR. FISCH: Your Honor, we'd like to recall two
19 witnesses, please.

20 Your Honor, as our first witness, we would like to
21 recall Dr. Cameron Wright, please.

22 THE COURT: And, Dr. Wright, you understand you're
23 still under the oath that was given earlier?

24 THE WITNESS: Yes, sir.

25 THE COURT: Thank you.

1 Go ahead and proceed.

2 MR. FISCH: Thank you, Your Honor.

3 Ladies and gentlemen of the jury, this is the phase of
4 the case where Dr. Wright has the opportunity to speak to
5 the issue of validity. He also has now the opportunity to
6 address the points made by Samsung's technical experts.

7 DR. CAMERON WRIGHT, PLAINTIFF'S WITNESS, PREVIOUSLY SWORN

8 DIRECT EXAMINATION

9 BY MR. FISCH:

10 Q. Good afternoon, Dr. Wright.

11 A. Good afternoon, sir.

12 Q. I understand that you are here to talk about all three
13 patents; is that correct?

14 A. Yes, sir, that is correct.

15 Q. Let's begin with the first, Doctor, the interface
16 patent, please.

17 A. Yes, sir. This is the interface patent, and I would
18 like to talk first about validity.

19 Q. What should the jury know, sir?

20 A. Well, sir, Samsung admits that the interface patent came
21 first. There's no other piece of information out there that
22 has all the elements of the claims that -- that we're
23 asserting here. There is no piece. They did not point to
24 any other piece that -- that covers it all.

25 So from that, you can turn to what they did talk about.

1 In particular, Dr. Baker tried to combine two dissimilar
2 patents to try to come up with something close to the
3 interface patent.

4 In particular, he tried to combine Toshiba and Umeda,
5 which I will call Toshiba 2 since it was really owned by
6 Toshiba, and Roe and Umeda.

7 Now, these are very dissimilar patents. It would be --
8 it would be like 115 years ago if -- if there's a patent on
9 a wing and there's a patent on an engine and you can somehow
10 imagine you can mush them together and come up with an
11 airplane. It's not going to work. It took the Wright
12 brothers to invent the airplane. You can't just take two
13 dissimilar things and put them together like that.

14 And particularly Toshiba describes an I/O cell. I
15 mean, that's what they talk about throughout the whole
16 patent is an I/O cell. What they don't talk about
17 throughout the patent, there's no mention of a camera.
18 There's no mention of an image processor. There's nothing
19 about that anywhere in the patent.

20 Umeda, on the other hand, is simply a -- a video system
21 to format the video signal. That's all it is. Nobody would
22 think to take those two things and mush them together. It's
23 just not going to happen. If you tried, it wouldn't work.

24 So -- so looking at Toshiba and Umeda, which is really
25 Toshiba 2, it just doesn't make sense. And really Toshiba

1 owned both patents, and they never combined them. So it
2 just makes sense that that is not a reasonable combination.

3 Q. Doctor, what about the applicability to digital cameras,
4 the very issue in these patents in this case?

5 A. Well, sir, the Toshiba patent as an I/O cell has no
6 applicability in its own rights to digital cameras.

7 Q. What about the next one, Doctor?

8 A. Well, the next combination that Dr. Baker discussed was
9 -- was Roe with Umeda. And once again, Roe is an I/O
10 circuit. It's -- it's just trying to convert some signals,
11 and the way that it makes them available to its output pins.
12 So that's all it is. It's just a tiny little cell, and it
13 even says in the patent that this is meant to be used in
14 part of a larger integrated circuit. That's all it's
15 supposed to do.

16 On the other hand, I already talked about Umeda just
17 being a video formatter. To put the two together, again,
18 makes no sense. If you -- if you were to try to put them
19 together for some reason, it most likely would not work.
20 And nobody would be motivated to put them together. They
21 come from two different areas. They're solving two very
22 different problems.

23 So to say that they somehow combine, they're going to come
24 up with all of the embodiments of the interface patent, I am
25 not convinced. That is -- that is just wrong.

1 Q. Then, Doctor, what is your conclusion with respect to
2 the validity of the interface patent?

3 A. Sir, my opinion, the interface patent remains valid.

4 Q. Every bit as much as the day it came out of the Patent
5 Office?

6 A. Yes, sir.

7 Q. Now, you heard some discussions about infringement from
8 the experts. Why don't we talk about infringement as it
9 relates to the interface patent. Where would you like us to
10 begin?

11 A. Yes, sir. Well, if you recall, I stepped you through
12 all of the elements of Claim 10 for the interface patent.
13 And if you think back to Dr. Baker's testimony, he really
14 had no argument on any of those except for the final
15 element, the element talking about the image processor
16 connected to the CMOS image sensor. That was really his
17 main argument.

18 Q. And what should we know about that, Doctor?

19 A. Well, sir, the main basis of his argument all comes down
20 to an incorrect interpretation of the claim construction.
21 Really, if you look at what he said, if you -- if you take
22 it all down to its basics, what he was trying to say is that
23 the claim construction was supposed to have an additional
24 word in there, that word being "both."

25 So if we look at the claim construction, on the right

1 is what the Court constructed here, "a processor connected
2 to the CMOS image sensor for processing image data received
3 from the single-ended and the differential interface."

4 It does not say received from both the single-ended and
5 differential interface. It just does not.

6 Q. And, Dr. Wright, just to clarify, what's on the left and
7 what's on the right?

8 A. On the left is the wording from the patent. On the
9 right is the Court's claim construction. The word "both"
10 does not show up in the claim construction.

11 Q. So if you were to take the approach that was taken by
12 Samsung's witness, what would that result in?

13 A. Well, sir, that would -- that would be a really bad
14 idea.

15 If you recall a slide I used to show the advantages and
16 disadvantages of single-ended and differential, here -- we
17 have it here. So you've got the bicycle and you've got the
18 race car, right? The kind of slow bicycle for -- for the
19 single-ended control signal, the -- the race car to -- to
20 move your image data fast.

21 If we accepted Dr. Baker's idea of the word "both,"
22 you'd be trying to ride the bicycle and ride the race car at
23 the same time. The overall result would be the overall data
24 rate would be slower and the drain on your battery would be
25 higher. It makes no sense to try to do that.

1 Q. So then, Doctor, what is your ultimate conclusion
2 regarding infringement?

3 A. Sir, I conclude that the -- that Samsung infringes the
4 interface patent.

5 Q. Thank you, Doctor. Why don't we look at the preflash
6 patent?

7 A. Yes, sir.

8 Q. Where would you like to begin there?

9 A. Sir, again, I think it's best to start with validity.

10 Q. What should the jury know about that, sir?

11 A. Once again, Samsung did not find any one piece. They
12 did not -- they admit that the preflash came first. There
13 is no one piece of -- of art out there, no other patent that
14 has all the elements of the preflash patent. So there's no
15 argument there.

16 Then they tried to make these combinations again. So
17 the combination that they tried to make in this case was
18 Sugimoto and Shimada. If you remember -- you remember Mr.
19 Parulski talked about this and he kept talking about Shimada
20 and Shimada. But really, Shimada is the Japanese version of
21 a U.S. patent called Sugahara. And the Patent Office looked
22 at both of those and the combination of those and still
23 decided to award the patent for the preflash patent.

24 Q. How do you know about that?

25 A. Well, I looked at the file history, the official file

1 history of that patent which shows just what the Examiner
2 looked at. It shows the letters going back and forth
3 between the inventors and the Examiner and what they
4 considered and all that.

5 And you can see right here -- I have an excerpt from
6 that file history. They definitely looked at Sugimoto and
7 Sugahara. So they looked at that combination, and they
8 still decided to award the patent.

9 Q. What else should we know, Doctor?

10 A. Well, you may recall that Mr. Parulski tried to justify
11 that he wanted to look at Shimada instead of Sugahara
12 because he said sort of in passing that, well, Sugahara
13 doesn't really have look-up tables.

14 That's not quite correct. Sugahara doesn't have the
15 big huge picture of a look-up table, but Sugahara definitely
16 talks about and discusses look-up tables.

17 And you see here an excerpt from the patent where it
18 talks specifically about look-up tables. This isn't the
19 only place in the patent where it talks about it. And the
20 way it's discussed, anybody working in the field would
21 understand that it's really the same idea that was shown in
22 the picture of the Japanese patent.

23 So the two are the same. I have -- I have both of them
24 right here. I have -- I have put them together
25 side-by-side, page-by-page. I've gone through both of them.

1 They disclose exactly the same invention. The Patent Office
2 looked at both of these and decided to award the patent for
3 the preflash patent.

4 Q. So, then, Doctor, what is your conclusion with respect
5 to validity of the preflash patent?

6 A. Sir, it's clear to me that the preflash patent remains
7 valid.

8 Q. Every bit as much as it was the day it was issued?

9 A. Yes, sir.

10 Q. What about infringement, Doctor?

11 A. Well, infringement, if you recall, we went through three
12 different claims. And Claim 1 had all these -- these
13 elements. And if you think back to Mr. Parulski's
14 presentation, one of the fundamental points on which he
15 rested to try to talk about no infringement, he kept saying
16 that LEDs are not strobes. Well, that's wrong. That is
17 just incorrect.

18 A strobe is simply a light source that can be turned on
19 and off very quickly. Doesn't matter what light source it
20 is. LEDs are turned off -- on and off very quickly all over
21 the place. In the real world, LEDs are used as strobes all
22 the time. That's a fundamental part of his argument, and it
23 just falls apart when you really look at how LEDs are really
24 used.

25 Another part of his argument, based on this claim, was

1 how he treated the predetermined preparatory duration of the
2 preparatory light. You remember it has to turn on for a
3 time that's known ahead. And, again, that -- that is
4 consistent with the Court's claim construction, but the
5 Court's claim construction doesn't say that you can only
6 turn it on for a certain amount of time. It says you have a
7 preparatory time that you have to emit it, and you have to
8 know before you turn it on.

9 It does not say that you can't keep it on. It doesn't
10 say when you have to turn it off. It doesn't say that if
11 the camera decides it needs more than one preparatory image,
12 that it can't do that.

13 That's completely consistent with the patent, and
14 that's completely consistent with all of the evidence that I
15 saw. And so there's nothing wrong with that. That's --
16 that's how it works.

17 Q. So your conclusion, Doctor, is Claim 1 infringed every
18 bit as much as it was when you walked through it?

19 A. Yes, sir. One other part of the claim, however, is he
20 did talk to the point of look-up tables. And he said sort
21 of in passing -- right at the end of his presentation, he
22 said in passing, look-up tables, oh, they don't -- they
23 don't include duration times. That's wrong. The look-up
24 tables definitely include duration time. I showed you
25 tables from Samsung documents that included duration time.

1 Not only that, if the table didn't include duration
2 times, it wouldn't work. In order to know how much light
3 you've put out there on the scene, you've got to know the
4 length of time and you've got to know the power. Just like
5 when you cook in your microwave, you set the power value,
6 you set the time. If you don't know those things, your --
7 the information you would gather from a preflash would be
8 meaningless.

9 So his arguments fall apart.

10 Q. So, Doctor, that's Claim 1, but, of course, this patent
11 has three claims that you have concluded infringe. What's
12 your view on Claim 6 and Claim 7?

13 A. Well, sir, Samsung still infringes Claim 1, and we go to
14 Claim 6. Mr. Parulski really didn't argue at all about
15 Claim 6. And Samsung still infringes Claim 6.

16 And if we go to Claim 7, if you recall, Claim 7 is
17 really just Claim 1 but with the slightly added words
18 "machine-readable instructions." So this is really just
19 taking Claim 1 and saying you're going to have a computer
20 program that does this. That's all it says.

21 So the same argument that I just made for Claim 1
22 applies to Claim 7. And, again, Samsung infringes Claim 7.

23 Q. Doctor, what's your overall conclusion with respect to
24 the preflash patent infringement?

25 A. Sir, I conclude that Samsung infringes the preflash

1 patent, and I -- I -- also it's -- they only have to
2 infringe one claim of these three to be infringing the
3 patent.

4 Q. Doctor, that leaves us with the final patent.

5 A. Yes, sir.

6 Q. The flicker patent?

7 A. The anti-flicker patent. So, again, sir, I would like
8 to start with validity.

9 So this is where Dr. Neikirk talked about Hashimoto and
10 Johnson. Now, these are not as similar to the anti-flicker
11 patent as he may have tried to make it sound. Hashimoto,
12 for example, never discloses setting the integration time to
13 an integer multiple of the variation of the -- of the
14 lighting, the flicker frequency. Never -- never says that.
15 Never.

16 It discloses the step of adjusting while maintaining.
17 Remember that one, that you can adjust the integration time
18 as you need to but you have to maintain it to an integer
19 multiple so that you -- you're eliminating the flicker?
20 Never discloses that one.

21 In fact, the Hashimoto patent really only talks about
22 two specific shutter speeds, 1/100th and 1/50th, neither of
23 which would reduce flicker in the United States. And the
24 patent is completely silent on whether you can use any other
25 shutter speeds in between there. So to say that that patent

1 is close to the anti-flicker patent is just not true.

2 Now, likewise with Johnson, Johnson has very, very
3 little to do with the anti-flicker patent. If you read the
4 Johnson patent, what it has to do with is it's trying to
5 convert signals from a very atypical CCD sensor that has
6 four colors and they're trying to reformat that information
7 into a standard video signal that would have three colors.
8 It's just a reformatter. That's all it's meant for.

9 Out of over 40 columns of text in that patent, there's
10 one paragraph that even mentions flicker. And in that
11 paragraph -- and there's a little figure that goes along
12 with it. Dr. Neikirk showed you that little figure. But
13 that one paragraph of seven sentences, it just talks about,
14 well, you can average the light over one cycle or two cycles
15 of the light variation, and that's really all it says.

16 And it talks of this flickerless mode in this
17 paragraph. Never says how you're supposed to achieve this
18 flicker mode, how you're supposed to -- what kind of
19 equipment it takes to do this. It's very -- just kind of in
20 passing. Obviously, wasn't very important to the inventors
21 if they only spent this tiny little paragraph on this big,
22 long patent.

23 So I don't find that these two prior patents are really
24 close to the anti-flicker patent at all.

25 Q. Are you the first, you think, Doctor, to reach that

1 conclusion?

2 A. No, sir. Both of these patents were available to Apple
3 and the other six companies in the previous litigation when
4 they looked at this. Those companies chose not to come
5 forward and try to use these two patents to try to show
6 invalidity. They -- they just did not do it.

7 Q. What about the combinations, Doctor, do they add up?

8 A. No, sir. Again, you try to make these little
9 combinations of things like slapping a wing and an engine
10 together and you don't get an airplane. But, again, they're
11 trying to make these combinations.

12 So the three that were discussed with Dr. Neikirk's
13 testimony were Hashimoto and Kinugawa, Hashimoto and Hata,
14 and Johnson and Oster. So I'll take -- I'll take those one
15 at a time. This is -- I won't take much longer.

16 And so Hashimoto and Kinugawa. Again, this assumes
17 that Hashimoto is really close to the anti-flicker patent,
18 and you just have to reach out and get one little piece from
19 Kinugawa and stick it in and it's somehow going to work and
20 make it equal to the anti-flicker patent. Not true.

21 Well, for -- for one thing, if you read the patents,
22 Hashimoto talks about a digital camera. Kinugawa talks
23 about an analog camera. Very different things. You can't
24 just take a piece out of one and slap it into the other one.
25 It would be like opening a case on an Apple computer and

1 opening a case on a PC, pulling out some chips on the Apple
2 and trying to shove them into the PC and thinking it's going
3 to work. Not gonna work.

4 Similarly, Hashimoto and Hata. Again, the assumption
5 is that Hashimoto somehow is so close to the anti-flicker
6 patent that you just need one little piece from Hata to --
7 to make it equal. Doesn't work like that. That -- that
8 piece that -- that Dr. Neikirk wanted to take from Hata was
9 the gamma correction.

10 If you read the Hashimoto patent carefully, look at the
11 diagrams, you'll see that that digital gamma correction, as
12 it's described, would not work in Hashimoto.

13 So I don't care where you take it from, Hata or
14 anywhere else, if you stick it into Hashimoto, you've just
15 rendered it non-functional. It won't work.

16 And so the words may line up nicely. You know, oh, now
17 I have gamma correction, but it doesn't work. So you don't
18 get a functional combination when you try to make that --
19 that combination.

20 Now, Johnson and Oster. Similar sort of thing. Again,
21 the assumption is Johnson is close enough to the
22 anti-flicker patent that you just have to reach out and grab
23 this one little thing from Oster. In this case, the one
24 little thing they're looking for was the flicker detection.
25 But, again, this -- this is really just not true.

1 Johnson is a video reformatter. It's just reformatting
2 from that strange four-color CCD to a standard three-color
3 video signal. That's what it's for. To go out and grab
4 some flicker detection piece out of Oster and somehow mash
5 it into Johnson, it's not going to work. Nobody would be
6 motivated to do that.

7 And that's -- the part of the test on these
8 combinations is that somebody would just be motivated to,
9 oh, those are so similar I can fit them together like hand
10 in glove. Not true in this case at all. So Johnson and
11 Oster, they're -- it's not a reasonable combination either,
12 sir.

13 Q. So, Doctor, what is your conclusion with respect to
14 validity?

15 A. Well, sir, I conclude that the anti-flicker patent
16 remains valid.

17 Q. Every bit as valid as the day it was issued by the
18 United States Patent and Trademark Office?

19 A. Yes, sir.

20 Q. Doctor, what are your thoughts on what you heard about
21 infringement?

22 A. Well, once again, for infringement, Dr. Neikirk talked
23 about lots of things in his presentation, but as I go
24 through these, then I remember what his presentation was.
25 One thing that sticks out in my mind is that he wanted you

1 to think that none of these methods are performed in the
2 United States. Well --

3 MR. HARNETT: May we approach, Your Honor?

4 THE COURT: Yes.

5 (Off the record bench conference.)

6 (Pause in proceedings.)

7 (On the record bench conference.)

8 MR. HARNETT: We are preserving -- Samsung is
9 preserving their objection to Dr. Wright being permitted to
10 offer testimony on the question of infringement of the method
11 claims of the '884 patent for the first time in Imperium's
12 rebuttal case.

13 It is Samsung's position that Imperium could have and
14 should have offered proof on the infringement of the method
15 claims in its direct and its failure to do so requires a
16 directed verdict that those claims are not infringed.

17 The record will show and Samsung will move in
18 post-trial papers that Dr. Wright said not one word about
19 the requirements in proving a method claim in his
20 non-infringement testimony during Imperium's case-in-chief.

21 And we strenuously object.

22 MR. FISCH: We're going to oppose any such motion.

23 THE COURT: Okay. Overruled.

24 (Bench conference concluded.)

25 THE COURT: Go ahead and proceed. If you'll turn the

1 mic back on. Oh, that's fine.

2 MR. FISCH: Thank you, Your Honor.

3 THE COURT: Wait, wait. Would you turn your mic back
4 on? And wait one second for the court reporter.

5 MR. FISCH: Much appreciated, Your Honor. Thank you,
6 sir.

7 Q. (By Mr. Fisch) Dr. Wright, when we left off, you
8 were --

9 THE COURT: Mr. Fisch, wait one second. The court
10 reporter is not ready yet.

11 MR. FISCH: No worries.

12 THE COURT: Okay. Go ahead.

13 MR. FISCH: Thank you all.

14 Q. (By Mr. Fisch) Dr. Wright, when we left off, you were
15 sharing some thoughts about Claim 1?

16 A. Yes, sir. I was starting to discuss the fact that Dr.
17 Neikirk talked about the fact that the methods described in
18 -- in this patent are not performed in the United States.

19 On the other hand, we have heard testimony in the last
20 few days that over a hundred million units have been sold in
21 the United States. So these -- these operations that are
22 part of the anti-flicker algorithm that Samsung uses, these
23 are automatic. They're part of the automatic-exposure mode.
24 You turn -- you turn the camera on, you turn the phone on,
25 these modes are -- are operating in the background. The

1 flicker algorithm is running in the background.

2 So there are a hundred million some-odd units operating
3 with these algorithms running. So I -- I -- the statement
4 that this is not performed in the United States is wrong.

5 Q. Where next, Doctor?

6 A. Well, sir, another -- another aspect that Dr. Neikirk
7 discussed is my interpretation of some of the line diagrams
8 that were used in some of the datasheets, and he pointed, in
9 particular, to one unit and he said, oh, well, this one does
10 do flicker correction, like you said. This one out of all
11 our products that Samsung makes, this one does it, but none
12 of the others do.

13 And diagrams like this -- this is a slide that I showed
14 you in my testimony, and there are diagrams like this in the
15 datasheets for all the sensors pretty -- you know, you can
16 find this information in one way or the other in all of
17 those sensors and how they're doing, the flicker algorithm.
18 And he was saying that, well, this -- this one product I can
19 show you these tiny little bumps and I can go along with the
20 idea that maybe that's an integer multiple, but I'm not
21 going to go along with this one.

22 In fact, if you look at the way that -- that is
23 labeled, if you look at the top -- so you look at the top
24 of -- of those diagrams, if you see on the left-hand side of
25 the vertical axis, you see where it says Exposure 1 and

1 Exposure 2? So -- so those are the only two allowable
2 exposure values that Samsung is willing to use in this mode
3 of operation.

4 And that angled line where it's -- where it's going
5 from Exposure 1 to Exposure 2, that's just it's
6 transitioning from one to the other. That's all.

7 Samsung does not use those intermediate values of -- of
8 shutter -- I'm sorry, of integration times. And how do I
9 know that? Again, I turn into the Samsung documentation
10 across-the-board, and in Samsung's own document where they
11 discuss their flicker algorithm, you can see down here at
12 the bottom where they're very adamant about the fact they
13 can only use integer multiples of one over two times the
14 frequency of the AC. So we're talking about in here one/120
15 in integer multiples of that. And they say N, the integer,
16 can be 1, 2, 3, dot, dot, dot.

17 So they've clearly said and they've clearly
18 communicated this to the other people in their company that
19 this is how you do flicker correction, and this is what we
20 use in our flicker algorithm.

21 So Dr. Neikirk's statement that it's not used in all
22 these other products is just incorrect.

23 Q. Doctor, let me ask you. If a Samsung product is used
24 under the right lighting conditions and there is no flicker,
25 then is the product infringing the anti-flicker patent?

1 A. Yes, sir, it is. It's using Samsung's flicker
2 algorithm, and Samsung's flicker algorithm, as I've stepped
3 you through during my -- my testimony earlier, goes through
4 all the steps of the anti-flicker patent.

5 And so if this automatic mode is engaged, you're in the
6 right environment, it -- it will use those steps that are
7 described in the anti-flicker patent. And so it would be
8 infringing.

9 Q. There are a few more claims to discuss, right, Doctor?

10 A. Yes, sir. So Claim 5 was not really contested, and I
11 still believe that Samsung infringes Claim 5.

12 Again, Claim 6 wasn't really contested. I still
13 believe Samsung infringes Claim 6.

14 When we get to Claim 14, this is a -- this is another
15 place where Dr. Neikirk said that I didn't show evidence, in
16 particular, about the overall integration time adjustment
17 block coupled --

18 MR. HARNETT: Objection, Your Honor. Same objection
19 that I put on the record before on this ground.

20 THE COURT: Overruled. Go ahead.

21 A. So the integration time adjustment block coupled to the
22 programmable integration time circuitry. Coupled, of
23 course, in this context just means they're connected
24 together. So it says that the adjustment block is coupled
25 to the circuitry that can do the adjustment. That's all it

1 says.

2 And I did show you evidence -- I showed you evidence
3 from Samsung's own datasheets where they talk about
4 adjusting the integration time, setting the integration time
5 to the integer multiple that they needed.

6 And if you take a step back from this also, does it
7 make any sense that Samsung would talk all about being able
8 to adjust the integration time on all these sensors and not
9 connect the adjustment block to the adjustment circuitry?
10 Of course, it's connected. That's the only way it would
11 work. If it -- if you didn't connect them, or couple them,
12 in the wording of the claim, you would have a non-functional
13 camera. So it does. I did show you that evidence.

14 Q. Claim 17, Doctor, what are your thoughts?

15 A. Claim 17, again, not contested. The value -- each one
16 of these elements were all shown, and, again, I believe that
17 Samsung is infringing Claim 17 of the anti-flicker patent.

18 Q. So what's your conclusion, Doctor, with respect to
19 infringement of the anti-flicker patent?

20 A. I conclude that, as I stated before, Samsung infringes
21 the anti-flicker patent.

22 Q. And are there any non-infringing alternatives to the
23 anti-flicker patent?

24 A. No, sir. This is the best way to do it. Some of the --
25 some of the ways that were suggested by Dr. Neikirk where

1 you could just set the integration time to -- to one of the
2 multiples, that's not the whole -- that's not the whole
3 invention.

4 Really, one of the key parts of the invention is this
5 adjusting-while-maintaining, so that you can go to other
6 integer multiples of the -- for the shutter time while
7 maintaining it at an integer multiple that you don't get
8 flicker.

9 Now, why do you have to do that? Well, if I'm taking a
10 video -- you know, maybe my son's birthday party or
11 something and somebody -- somebody kind of walks by or they
12 open a shade or they do something, the lighting changes,
13 right? The lighting changes when you're taking videos.
14 If you don't have this ability to adjust while maintaining,
15 the camera cannot adapt to this changing light. You can't
16 just lock in one shutter speed -- or, I'm sorry, integration
17 time. You can't just lock that in and expect to take a good
18 video. I don't see that as a -- as an appropriate
19 non-infringing alternative, sir.

20 Q. Doctor, once again, thank you very much for the
21 education.

22 MR. FISCH: Your Honor, I'll pass the witness at this
23 time.

24 THE COURT: Cross-examination.

25 CROSS-EXAMINATION

1 BY MR. PEPE:

2 Q. Good afternoon, Dr. Wright.

3 A. Good afternoon, sir.

4 Q. It's good to see you again. We saw each other up in
5 Wyoming back in October?

6 A. Yes, sir, we did.

7 Q. I just wanted to clean up a few points about your
8 background.

9 How many issued patents do you have?

10 A. Sir, I have one.

11 Q. And are you being paid for your time that you've worked
12 on this case?

13 A. Yes, sir, I am.

14 Q. Now, Doctor, Samsung's experts, you saw them testify,
15 correct?

16 A. Yes, sir, I was here for all of their testimony.

17 Q. Over seven hours of testimony?

18 A. It was a long time, sir.

19 Q. They put up figures from the prior art patents, texts
20 from the prior art patents; is that right?

21 A. That's correct, sir.

22 Q. We had color-coded demonstratives; is that right?

23 A. Very attractive, sir.

24 Q. You didn't show the jury one piece of prior art during
25 your rebuttal; is that right?

1 A. Say that again, sir.

2 Q. You didn't show for the jury a demonstrative that
3 included anything from the prior art. You didn't show a
4 figure from the prior art; isn't that right?

5 A. I disagree, sir.

6 Q. Did you show a figure from the prior art to the jury?

7 A. Yes, sir.

8 Q. Which one?

9 A. I showed -- I showed the excerpt from Sugahara.

10 Q. I stand corrected. Did you show anything from Roe?

11 A. Didn't need to, sir. It wasn't necessary.

12 Q. I'm not asking you if you needed to. I'm asking you if
13 you did.

14 A. No, sir. It wasn't necessary.

15 Q. Did you show anything from Toshiba?

16 A. No, sir. It wasn't necessary.

17 Q. Did you show anything from Umeda?

18 A. No, sir. It wasn't necessary.

19 Q. You showed two technical figures in response to the
20 testimony on non-infringement from Samsung's experts,
21 correct. Just the two?

22 A. Yes, sir.

23 Q. Samsung's experts testified for over seven hours, and
24 you were done in about 25 minutes --

25 A. Yes, sir.

1 Q. -- in rebuttal. That's right?

2 A. That's correct, sir.

3 Q. Now, you understand that the Court will be instructing
4 the jury on the law, right?

5 A. Yes, sir.

6 Q. You understand that they will -- the Court will be
7 instructing the jury on the law of obviousness; is that
8 right?

9 A. Yes, sir. I assume they will.

10 Q. Under the law of obviousness, it's appropriate to
11 combine references if there was a motivation to a person of
12 skill in the art to combine them, right?

13 A. Yes, sir. I -- I addressed that in my testimony.

14 Q. And if there are two pieces of prior art that can be
15 combined and they disclose every element, that claim is
16 invalid, right?

17 A. The pieces of art that -- to be combined, must combine
18 into a functional unit.

19 Q. You believe the Judge is going to instruct the jury that
20 when the two pieces of prior art are combined, it -- you
21 need to be able to build a functional unit?

22 A. I wouldn't presume to predict what the Judge is going to
23 tell the jury.

24 Q. A claim that is obvious is just as invalid as a claim
25 where every limitation is shown in a piece of prior art; is

1 that right? That's the difference between anticipation and
2 obviousness, correct?

3 A. Anticipation means every claim is there. Obvious means
4 some combination can -- can equal what you had in another
5 patent.

6 Q. It's just as invalid under obviousness as it is as
7 anticipation, correct?

8 A. No argument there, sir.

9 Q. You talked a little bit about the predetermined duration
10 limitation.

11 A. Yes, sir.

12 Q. Before the camera turns the preflash on, it does not
13 know how long it will stay on; isn't that correct?

14 A. Say that again, sir.

15 Q. Before the camera turns the preflash on, the camera does
16 not know how long it will stay on; isn't that correct?

17 A. Well, sir, it's for a predetermined time, but there can
18 be multiple predetermined times.

19 Q. Sir, that's not what I'm asking you. I would appreciate
20 it if you could try to answer my question.

21 Before the camera turns the preflash on, the camera
22 does not know how long it will stay on; isn't that correct?

23 A. It depends on the implementation, sir.

24 Q. You admitted on the cross-examination from my partner,
25 Chris Harnett, that before the camera turns the preflash on,

1 it does not know how long it will stay on?

2 A. In general. In general terms, if you need more than one
3 preparatory image, it might take another one. In that case,
4 it would leave the preflash on longer.

5 Q. Though it may need others?

6 A. Yes, sir.

7 Q. So before the flash turned on, you didn't know how long
8 it was going to stay on?

9 A. That's consistent with the description of the algorithm,
10 sir.

11 MR. PEPE: Can we put up PDX-46? We're going to
12 switch gears and talk about the '290 patent for a second.

13 Q. (By Mr. Pepe) You talked on your direct about the claim
14 limitation shown there in red?

15 A. I'm sorry, sir. I thought you said the '029.

16 Q. Oh, '290 patent. I said we're going to switch gears to
17 '290 patent.

18 A. So the interface patent?

19 Q. Yeah, interface patent.

20 A. Yes, sir.

21 Q. You agree that the jury will not be receiving
22 instruction that it is image data received from the
23 single-ended or the differential interfaces; isn't that
24 right?

25 A. Yes, sir.

1 Q. They're going to be receiving an instruction from the
2 Judge that the image data must be received from the
3 single-ended and the differential interface; isn't that
4 right?

5 A. Yes, sir, because the interface is a single-ended and
6 differential interface.

7 Q. And the image data must be received from the
8 single-ended and the differential interface?

9 A. No, sir, I disagree.

10 Q. Sir, these are the words that the Judge will be
11 instructing the jury on.

12 A. Yes, sir.

13 Q. Doesn't it say image data received from a single-ended
14 and the differential interfaces?

15 A. The interface is a single-ended and differential
16 interface. It does say nothing about which way the image
17 data goes. If you look just above that, it talks about with
18 the understanding that the data interface circuit need not
19 be restricted to communicating only image data. That says
20 that there's other data and that that can go on the
21 single-ended side, which it does, and it can be image data
22 which goes on the differential side, which it does. And to
23 implement it any other way would be technically infeasible.

24 Q. Dr. Wright, is the Court going to instruct the jury that
25 that last limitation means a processor connected to the CMOS

1 image sensor for processing image data received from the
2 single-ended and the differential interfaces? Yes or no?

3 A. This is the Court's construction, and the jury, I'm
4 sure, will be instructed to use the Court's construction.

5 And I interpreted the Court's constructions, as well, and in
6 the way that Samsung uses this interface.

7 Q. You're interpreting the Court's construction?

8 A. I have not changed it, sir.

9 Q. You're interpreting it, right?

10 A. No, sir. Dr. Baker added the word "both."

11 Q. And you're changing it to "or"?

12 A. No, I'm not. Logically, it -- the way I have
13 interpreted it is perfectly correct.

14 MR. PEPE: Why don't we move on and look at DX-143?

15 Q. (By Mr. Pepe) Now, Dr. Wright, you testified the '290
16 patent was the first to come up with the invention in Claim
17 10, right?

18 A. I'll have to put my glasses on, sir.

19 Q. I'm sorry. Take your time.

20 Do you recognize this is the '290 patent?

21 A. Yes, sir, I do.

22 Q. You agree that CMOS images, image processors, data
23 interface circuits, single-ended interfaces, and
24 differential interfaces were all known in the prior art
25 prior to April '99; isn't that right?

1 A. Well, of course, sir. All the pieces were out there.

2 Q. And it was also known to use single-ended interfaces
3 with CMOS images; isn't that right?

4 A. Some CMOS images use single-ended interfaces, sure.

5 Q. In fact, the '290 patent says that, doesn't it?

6 A. Yes, sir, it does.

7 Q. You also agree that it was known art to use differential
8 interfaces with CMOS images, right?

9 A. Yes, sir, of course.

10 Q. And, in fact, the Patent Office took official notice of
11 that?

12 A. Yes, sir.

13 Q. Now, Dr. Baker combined Umeda with Roe and Toshiba.
14 Now, you testified that these are in different fields; is
15 that right?

16 A. Yes, sir, I did.

17 Q. Now, Umeda --

18 MR. PEPE: Can we pull up Umeda 420?

19 Q. (By Mr. Pepe) Do you recognize the Umeda patent?

20 A. Yes, sir, I do.

21 Q. And you see that Umeda has an interface section?

22 A. I do, sir, and I see that the -- the -- the way that
23 it's drawn would -- would show to anyone who works in this
24 field that they're trying to show a parallel interface
25 coming out of that interface section -- neither single-ended

1 nor differential.

2 Q. Sir, it requires an interface section, right?

3 A. Yes, sir, it's a box that says "interface section."

4 Q. And the patent says -- Umeda says you should select the
5 appropriate interface?

6 A. Yes, sir, they say whatever works.

7 Q. Now, during your testimony, you referred to Toshiba as
8 disclosing an I/O cell, not an interface; is that right?

9 A. It is not an interface, sir. As I described in my
10 earlier testimony, to be an interface, you need both an
11 agreement or protocol and you also need that connection.

12 Q. Toshiba doesn't disclose an interface. That's your
13 testimony?

14 A. That is correct, sir.

15 MR. PEPE: Why don't we pull up the Toshiba
16 reference? That's DX-198. And can we go to Page 12 of this
17 document? Actually, Mr. Miller, the page number is on the
18 bottom right, 12. Nope. Bottom right where it says Page 25, I
19 would like Page 12 instead. Thank you.

20 Q. (By Mr. Pepe) You see this is a translation
21 declaration?

22 A. Yes, sir, I see that.

23 Q. And you see No. 2, it says: I am competent to translate
24 between Japanese and English with 16 years of translation?

25 A. That is what it says.

1 Q. In 4, it says: To the best of my knowledge and belief,
2 the attached English language document is true, complete,
3 and correct translation?

4 A. Yes, sir, that is what it says.

5 Q. And you see in No. 6 that the declarant says that he's
6 been warned that willful false statements and the like are
7 punishable by fine or imprisonment?

8 A. Yes, sir, I see that.

9 Q. He was declaring this under penalty of perjury?

10 A. Yes, sir.

11 MR. PEPE: Can we go to the next page?

12 Q. (By Mr. Pepe) This is a second translation declaration,
13 and you see in 2, again, the person here says: I am
14 competent to translate between Japanese and English with 25
15 years of translation experience?

16 A. Yes, sir, I see that.

17 Q. And in 3: To the best of my knowledge and belief, this
18 translation is true, complete, and correct. You see that?

19 A. Yes, sir, I see that, too.

20 Q. And this person has also been warned that willful false
21 statements and the like are punishable by fine or
22 imprisonment?

23 A. I see that, too, sir.

24 Q. If we go to the next page, just to confirm that this was
25 actually signed by the declarant --

1 MR. PEPE: Can we go to Page 16, and look at the
2 purpose paragraph?

3 Q. (By Mr. Pepe) Now, Dr. Wright, you're not contesting
4 the accuracy of this translation, correct? We talked about
5 that at your deposition, right?

6 A. Yes, sir.

7 Q. So you're not contesting the accuracy?

8 A. No, sir.

9 Q. In the purpose paragraph, it says: To make it possible
10 to selectively use a differential interface and a
11 single-ended interface, correct?

12 A. That is what it says, sir.

13 Q. That's what the words say?

14 A. That's what the words say.

15 Q. That's the words the two Toshiba engineers chose to
16 describe their invention?

17 A. That's the word that the translator used to put in there
18 for what the Toshiba engineers actually said.

19 Q. You're not contesting the accuracy of that?

20 A. No, sir, I'm just trying to be precise.

21 Q. But you didn't ask for your own translation, right?

22 A. No, sir, I did not.

23 Q. No, you didn't. If you had any issue with this
24 translation, you could have asked for your own, right?

25 A. Sir, I don't have an issue with the translation. It's

1 how you interpret the words.

2 Q. Well, what I'm saying to you is that we have two
3 certified translators that say that Toshiba discloses a
4 differential interface and a single-ended interface, right?

5 A. Yes, sir, but the word "interface" has multiple
6 meanings.

7 Q. What I'm asking you, sir, is whether or not it discloses
8 -- it states differential interface and single-ended
9 interface?

10 A. Yes, sir, and it uses interface in the most general
11 possible terms which is simply a boundary. Just like when
12 you look in the side of an aquarium and you look -- air goes
13 to water, that's a boundary. When you look at an optical
14 lens, that's a boundary. It's also sometimes often called
15 an interface.

16 Q. Are you testifying that the Toshiba engineers did not
17 intend to use single-ended interface and differential
18 interface?

19 A. I believe that they intended to be talking about
20 single-ended and differential methods of making information
21 available. But in their patent they spoke nothing about
22 what happens at the other end or how there's any kind of
23 understanding about how it goes and that --

24 Q. It says --

25 THE COURT: Dr. Wright?

1 THE WITNESS: I'm sorry, I apologize. I apologize.

2 THE COURT: Don't talk over me. So don't -- okay,
3 one at a time.

4 MR. PEPE: I'm sorry.

5 A. That is -- that is just a critical part of a interface
6 to have that understanding, along with the connection.
7 Otherwise, you cannot transmit data.

8 Q. (By Mr. Pepe) The Toshiba engineers used the term
9 "interface." That's all I'm asking.

10 A. Whatever word they used, that then got translated to
11 interface.

12 Q. Dr. Baker believes this discloses an interface, right?

13 A. Evidently he does, sir.

14 MR. PEPE: Could we go to Page 19, and can we look at
15 Claim 1?

16 Q. (By Mr. Pepe) So when defining their invention, if you
17 look at that second line there, they used the term
18 "interface circuit," right?

19 A. Yes, sir. I see that.

20 Q. But you don't believe Toshiba discloses an interface
21 circuit?

22 A. No, sir, I do not.

23 MR. PEPE: Go to Page 21, Claim 2.

24 Q. (By Mr. Pepe) That also says interface circuit,
25 correct?

1 A. Yes, sir, same reasons as before.

2 MR. PEPE: Let's try 25.

3 Q. (By Mr. Pepe) And in the field of the industrial
4 application --

5 MR. PEPE: Can we zoom in on that, Mr. Miller?

6 Q. (By Mr. Pepe) Talks about an I/O circuit for
7 interfacing with the outside. So they use interface there,
8 too, don't they?

9 A. Yes, sir, and that's one of the other uses of the word
10 "interface." That's one of the key things that keys you in
11 when you're reading this patent, that they're not talking
12 about a data interface where you're sending information from
13 Point A to Point B.

14 What this is doing is making inter -- is making voltage
15 levels available at these output pins of a larger integrated
16 circuit where this particular circuit was meant to be used.

17 Q. But they're available at the output pins for use by
18 other components and devices, right?

19 A. Yes, sir.

20 Q. So it's something that's sending information from one
21 side to another side, right?

22 A. Well, all they talk about is making it available to
23 their pins. There's no discussion about how it gets there
24 or what the agreement or protocol is. So in the -- in the
25 sense of a data interface circuit, which is another use of

1 the word "interface," this does not meet that test.

2 Q. So you have the eye and the brain?

3 A. Yes, sir.

4 Q. And the information that's available at the eye is then
5 sent over to the brain with an interface, right?

6 A. That would be an interface, sir, yes.

7 Q. But this isn't an interface?

8 A. This is not. This would be like the little -- the
9 little signal is dangling from the end of the rods and cones
10 in our retina and just hanging there.

11 MR. PEPE: Let's go to Page 27 and focus in on the
12 problem to be solved by the invention.

13 Q. (By Mr. Pepe) Do you see in about the fourth line down
14 it, again, uses a single-ended interface?

15 A. Yes, sir, I see that.

16 Q. And you see a couple of lines down it talks about a
17 differential interface?

18 A. I see that, too, sir.

19 Q. And a couple of lines up, it talks about I/O circuits,
20 right?

21 A. Yes, sir, because it is. It's an I/O circuit.

22 Q. But you don't believe Toshiba discloses a single-ended
23 interface or a differential interface or a data interface
24 circuit?

25 A. It is single-ended and differential options. It's

1 selected. It can use one or the other. It does not
2 describe a data interface circuit, as Dr. Baker tried to use
3 it for. He tried to use it for something for which it was
4 not intended.

5 MR. PEPE: Let's go back to Umeda 420. And can we go
6 to Column 1 and look at Lines 49 through 66?

7 Q. (By Mr. Pepe) You see that sentence on the bottom, it
8 says: If, for example, an appropriate interface is not
9 used, a large number of pins are required to result in an
10 increase in the chip area of the sensor or the size of the
11 package.

12 Do you see that? I'm sorry, I didn't know you didn't
13 have your glasses on.

14 A. Yes, sir, I see it.

15 Q. So an appropriate interface here is not going to have a
16 large number of pins; isn't that what Umeda is saying about
17 interface section 108?

18 A. Well, they say the opposite. They say if it's not
19 appropriate, that you'd have a large number of pins.

20 Q. I agree with that. And when you have a large number of
21 pins, it increases the size, and it increases the cost?

22 A. Yes. And that's one of the purposes of this patent is
23 to try to get it to the smaller size and cost.

24 Q. Well, ideally, you want an interface that has a minimum
25 number of pins, right?

1 A. Yes, sir. But Umeda said nothing about using a
2 single-ended or differential interface. And the diagrams in
3 Umeda seem to indicate to use a parallel interface.

4 MR. PEPE: Let's go to Column 2, Line 55 through 58.

5 Q. (By Mr. Pepe) This is a summary of the invention. You
6 see that it talks about a high performance, solid-state
7 image sensor?

8 A. Yes, sir, I see that.

9 Q. And talks about having high general versatility?

10 A. Yes, sir.

11 Q. You agree with me that those characteristics would also
12 apply to the type of interface that you would use in Umeda?

13 A. I'm not -- I'm not sure if I follow the question, sir.

14 Q. Well, if you're trying to get a high-performance, highly
15 versatile CMOS imager, you would want an interface that
16 would help provide those features or characteristics, right?

17 A. Well, I think that's an over generalization, I'm afraid,
18 sir.

19 Q. But you agree that Umeda says that it wants to have a
20 high performance, solid-state image sensor having high
21 general versatility?

22 A. Sir, but what's the resolution of the sensor? If it's
23 only, say, 640 by 480, you could easily get away with a
24 parallel interface, which is what the diagrams show. And
25 when this was written, 640 by 480 was extremely common

1 resolution for these types of imagers. Actually 512 by 512
2 was even more common back then.

3 Q. Dr. Wright, I was just asking you what the words said.

4 A. Just trying to be complete, sir.

5 Q. I understand. You can have a chance to be complete when
6 Mr. Fisch gets back up. I would like you to focus on my
7 questions, though.

8 A. Yes, sir.

9 Q. Let's go back to -- well, let me ask you this. You had
10 that figure up before with the bicycle and then the -- what
11 was on the other side, the car?

12 A. That was a race car, sir.

13 Q. Race car. You said the differential interface uses more
14 power; is that right?

15 A. Yes, sir. The way it's implemented, it uses more power.

16 Q. Isn't it true that a differential interface could use
17 less power?

18 A. There are certain situations in the way you implement it
19 that that could be true, but that's not the case here.

20 Q. When you say "here," what do you mean?

21 A. Well, I'm talking about the interface patent and how --
22 how it relates to the way the MIPI standard is implemented
23 in all of Samsung's products. The way that's done, the way
24 the termination resistor is removed for single-ended mode,
25 it goes to a very low power situation. And so that when

1 you're in differential, the power is high, but you can send
2 data very quickly. But when you go to single-ended, it
3 basically turns off that -- that little termination resistor
4 and the power dissipation goes to almost nothing, and so it
5 can save your battery.

6 Q. So you're saying the differential in the MIPI uses less
7 power, if I understand you correctly?

8 A. No, sir, that's not what I said. That's the opposite of
9 what I said.

10 Q. So what are you saying?

11 A. In the MIPI standard using CSI-2 and D-PHY, the
12 differential mode uses more power, but has faster data rates
13 than in single-ended mode. In single-ended mode, you can
14 only send data more slowly, but it hardly uses any battery
15 power. It uses less battery power than the differential
16 mode.

17 MR. PEPE: Can we go to DX-143, the '290 patent? Can
18 we go to Column 3 and look at the summary of the invention?
19 And can we blow up the summary, Mr. Miller?

20 Q. (By Mr. Pepe) You see Line 25, starting with the word
21 "further"? '290 patent says: Further providing a
22 differential interface allows a lower noise and a lower
23 power interface for external devices that can support a
24 differential signal. Did I read that correctly?

25 A. You read it correctly, sir, but again --

1 Q. Thank you, sir.

2 A. -- that's on only a particular type of --

3 Q. Dr. Wright, I was just asking if I read it correctly.

4 Thank you.

5 We had some discussions -- you had some discussions
6 with Mr. Fisch about Claim 17, and you said it wasn't
7 being -- infringement wasn't being contested, or at least I
8 think you said something along those lines?

9 A. Which patent are we discussing now, sir?

10 Q. Claim 17 of the '884.

11 A. So we're at the anti-flicker patent now?

12 Q. Yes. That depends from Claim 4; is that right, if you
13 remember?

14 A. It's a dependent claim, yes, sir.

15 Q. And Samsung's contesting infringement of Claim 14; isn't
16 that right?

17 A. Yes, sir.

18 Q. So by default, it's also contesting infringement of 17
19 because it's a dependent; isn't that right?

20 A. It would follow through, sure.

21 Q. Okay. Just wanted the record to be clear.

22 Sorry. I'm jumping around from patent to patent.

23 A. That's why we use names, sir, not numbers.

24 Q. True. Let's talk about the '029 patent, the preflash.

25 A. Pre-flash patent, yes, sir.

1 Q. Now, Mr. Parulski is relying upon a combination of
2 Sugimoto and Shimada, right?

3 A. That is correct, sir.

4 Q. And you testified that -- there's a lot of S's here,
5 right -- Sugimoto, Sugahara, and Shimada?

6 A. Yes, sir, and that's correct.

7 Q. You said the Patent Office already considered that
8 combination because the Patent Office had considered the
9 combination of Sugimoto and Sugahara, right?

10 A. That's correct, sir.

11 Q. And I wrote it down. You said the two are the same.
12 That's what you said, right?

13 A. They disclose the same invention, yes, sir.

14 MR. PEPE: Can we pull up Shimada, which is 202, and
15 can we go to Page 19 of the translation?

16 Q. (By Mr. Pepe) This is the look-up table that Mr.
17 Parulski is relying on, right? Or one of the look-up tables
18 that he's -- sorry.

19 A. Yes, sir, it is. And this look-up table only
20 encompasses main flash. It has nothing to do with duration.

21 Q. Dr. Wright, I just asked you if he was relying on it.

22 A. That's what -- that's what Mr. Parulski pointed to, yes,
23 when he said that Sugahara had no look-up tables.

24 Q. And this has a column that says relative amount of
25 emitted light, correct?

1 A. Sure.

2 Q. Has another column that says, flash time?

3 A. Yes, sir.

4 Q. Has lots of numbers?

5 A. Lots of numbers, sir.

6 Q. And you said that Sugahara and Shimada are exactly the
7 same, right?

8 A. No, sir, I did not say they're exactly the same. I said
9 they disclose the same invention. They're -- I -- I said
10 that I put them side-by-side and I looked through them,
11 paged through them, and they basically describe the same
12 invention.

13 MR. PEPE: Your Honor, can I approach the witness
14 with a copy of Sugahara?

15 THE WITNESS: I have one here, sir.

16 Q. (By Mr. Pepe) You have one? Great.

17 So here's the look-up table that Mr. Parulski is
18 relying on. Can you please tell us where in Sugahara we
19 could find that specific look-up table?

20 A. Oh, sir, as I mentioned in my testimony, they -- they
21 did not use a figure in the U.S. patent. They described it.
22 That's where I showed the pullout from that -- from Sugahara
23 where they described the look-up table in such a way that
24 anybody who was going to implement this would certainly
25 understand and come up with the equivalent of what you see

1 here in the figure.

2 Q. So where is that in Sugahara?

3 A. I showed a blowup of it. It's -- it's in several
4 places. It --

5 Q. As you're looking, you agree with me that this exact
6 look-up table that Mr. Parulski relied upon with these
7 figures, with these two columns described as relative amount
8 of emitted light and flash times, that table that he relied
9 on is not in Sugahara?

10 A. The figure showing that table is not there. The
11 description of it, however, is.

12 On Column 4, around -- starts around Line 25, and you
13 get over to Column 6 and it shows up again there around Line
14 55. And it's clear, it discusses a look-up table to which
15 the relation between K, which is the brightness, and the
16 light generating time is stored.

17 So that is basically the same thing that the figure
18 shows. It's just a matter of whether you want to talk about
19 it or whether you want to draw it.

20 Q. I'm looking at Column 4. It says a look-up table in
21 which the relation between K and the light generating time T
22 is stored.

23 A. Yes, sir.

24 Q. And you're saying that that's the same as this? If
25 that's your testimony, that's fine, we can move on.

1 A. Yes, sir.

2 Q. Thank you. Dr. Wright, you were here for Mr. Melfi's
3 testimony?

4 A. Yes, sir, I was.

5 Q. And you understand that to show that ESS was practicing
6 Imperium's patents, Mr. Melfi needed to show that each and
7 every element of the claim was being practiced by ESS; is
8 that right?

9 A. Mr. Melfi was a fact witness.

10 Q. Right. He didn't do an analysis to show that the '884
11 patent was being used by ESS; isn't that right?

12 A. No, sir. He was a fact witness relating his experiences
13 and -- and what happened to him.

14 Q. He didn't do an analysis to show that the '290 patent
15 was being used by ESS?

16 A. No, sir. That's not what he was here for.

17 Q. And he didn't do an analysis for the '029 patent,
18 either, right?

19 A. No, sir, he did not.

20 Q. And you haven't done an analysis to determine or to
21 establish whether ESS was using these patents in the
22 mid-2000s, right?

23 A. That is not what I was asked to do, sir.

24 Q. You are offering no opinions on that?

25 A. Right. I was asked to look at these three patents to

1 see if Samsung infringed them, and my conclusion is that
2 Samsung does infringe these three patents.

3 Q. I'm talking about ESS. There's no evidence that you saw
4 from the trial that establishes that ESS actually used these
5 patents, right?

6 A. Sir, that's -- that's beyond the scope of what I was
7 asked to look at.

8 Q. I was just asking yes or no. You were here for the
9 whole trial. You didn't hear one scintilla of evidence that
10 ESS was practicing each and every claim -- or each and every
11 element of the claims of the '884, '029, and '290 patent?

12 A. That's not what I've been asked to look at, sir.

13 MR. PEPE: Your Honor, I pass the witness.

14 THE COURT: Mr. Fisch, anything additional?

15 MR. FISCH: No further questions, Your Honor.

16 THE COURT: You may step down. Thank you.

17 THE WITNESS: Thank you, sir.

18 THE COURT: And do you have another witness?

19 MR. SALTMAN: Your Honor, Imperium calls Ms. Michele
20 Riley back to the stand.

21 THE COURT: Ma'am, you understand you're still under
22 oath?

23 THE WITNESS: Yes, sir.

24 THE COURT: Okay. Go ahead.

25 MR. SALTMAN: Ladies and gentlemen of the jury,

1 Ms. Riley has the opportunity to rebut the testimony of
2 Samsung's damages expert.

3 CROSS-EXAMINATION

4 BY MR. SALTMAN:

5 Q. Good afternoon, Ms. Riley.

6 A. Good afternoon.

7 Q. Let's start where you and Dr. Perryman agree. Could you
8 list some of those areas of agreement for us, please?

9 A. Well, fortunately, as you heard, we have significant
10 areas of agreement, Dr. Perryman and myself. So we both
11 agree that ESS and Samsung are the parties to the
12 hypothetical negotiation. We both agree it would take place
13 in early 2007. We both agree the parties would have perfect
14 information. We both agree that they assume or agree that
15 the patents are valid and infringed. We both agree that the
16 parties would be looking at the Georgia-Pacific Factors --
17 the 15 factors he and I both discussed. And we also agree
18 almost exactly on the number of units that Samsung sold of
19 the accused products. We're off by 1 percent, which I think
20 can be explained by the different methods we used to
21 forecast sales through the date of trial.

22 Q. And you both agree about the nature of settlement
23 agreements?

24 A. Yes, we also both agree that the settlement agreements
25 you've seen that are the license agreements entered into in

1 settlement of litigation are fundamentally different from
2 the hypothetically negotiated license.

3 Q. Do you have any areas of disagreement?

4 A. We do. I think there are three main areas of
5 disagreement, which could explain the differences between
6 our conclusions regarding damages.

7 MR. SALTMAN: Mr. Rennick, could you please put up --
8 yeah.

9 Q. (By Mr. Saltman) All right. Ms. Riley, what's the
10 first fundamental disagreement you have with Dr. Perryman?

11 A. The first main disagreement Dr. Perryman and I have
12 relates to Factor 11, which is the extent to which Samsung
13 has made use of the invention and any evidence relating to
14 the value of that use.

15 So when I was here with you the other day, I discussed
16 my consideration of Samsung's volume of accused product
17 sales and also their approach to Mr. Melfi to determine how
18 to solve the problems that were solved by the patents. And
19 I also discussed Samsung's interest in the Imperium patents
20 that it demonstrated through its broker, Mr. Kaler, so their
21 interactions with Imperium through their broker to
22 demonstrate their interest in the portfolio.

23 Q. And why do you and Dr. Perryman disagree on this?

24 A. Well, we disagree because we both did not have all the
25 information that was available regarding Samsung's interest

1 in these patents.

2 So you heard Mr. Bang testify via video that Samsung's
3 interest in the Imperium portfolio terminated in 2011. We
4 now have learned during trial this week that Samsung,
5 through its broker, was engaged -- was interested in the
6 patents during 2012 and 2013, as well.

7 So I think if Dr. Perryman had had that information, he
8 and I wouldn't have this fundamental disagreement because he
9 would have -- he would see Samsung's continued interest in
10 the patents.

11 MR. SALTMAN: Mr. Rennick, if you could please pull
12 up PX-768? Thank you, Mr. Rennick.

13 Q. (By Mr. Saltman) Is this some of the new information
14 you were discussing, Ms. Riley?

15 A. Yes. The new information is e-mails between Mr. Bang
16 and Mr. Kaler.

17 MR. SALTMAN: And, Mr. Rennick, if we could please
18 turn to Page 4 and 5 of PX-768. And you read my mind. Thank
19 you very much, Mr. Rennick.

20 Q. (By Mr. Saltman) What do we see here, Ms. Riley?

21 A. Here, we see in July 2012, Mr. Bang, Jun, at the bottom
22 signature there, is asking Mr. Kaler to clarify something
23 for Samsung when Samsung was looking at the Imperium
24 litigation in Texas where Imperium sued Apple, LG, Sony, the
25 prior litigation that we have been talking about.

1 So Samsung was interested in determining essentially what
2 was happening in that case and asked Mr. Kaler to check
3 in -- check into it.

4 MR. SALTMAN: Mr. Rennick, if we could go to Page 3
5 and blow up the bottom email, please.

6 Q. (By Mr. Saltman) What do we see here, Ms. Riley?

7 A. So next in -- on Halloween, October 31 of 2013, Mr.
8 Kaler e-mails Mr. Bang at Samsung and says that counsel for
9 Imperium -- this is in the highlighted portion of the
10 e-mail -- counsel for Imperium has told him that the next
11 phase for Imperium is to sue Samsung in Federal District
12 Court.

13 And then down at the bottom, yellow highlighted
14 portion, Mr. Kaler says: Instead of initiating suit,
15 counsel for Imperium thought this would be a good time to
16 reconnect to see if my client, which we know is Samsung,
17 would like to either license or purchase any or all of the
18 patents at issue prior to such a lawsuit. So this is in,
19 again, 2013.

20 Q. And did Mr. Bang respond to this e-mail?

21 A. Yes. Mr. Bang responded a few days later.

22 As you can see, this email is dated November 5th, 2013. He
23 responded to Mr. Kaler that he would need time to revisit
24 this -- this, of course, being the Imperium patents, and he
25 will get back to you -- to Mr. Kaler soon.

1 MR. SALTMAN: Mr. Rennick, if we could go to Page 1
2 and zoom in on the bottom email, please?

3 Q. (By Mr. Saltman) What happened next, Ms. Riley?

4 A. Next, we have -- this is towards the end of December
5 2013 -- December 4th, the highlighted portion of the e-mail
6 from Mr. Kaler, again, to Mr. Bang at Samsung. Mr. Kaler
7 says that according to Imperium's counsel, Vince -- that's
8 Mr. Capone -- would like to present a set of pricing options
9 to Mr. Kaler for Samsung to consider, a licensing offer and
10 an offer to purchase the entire portfolio. So Mr. Kaler is
11 communicating this to Mr. Bang.

12 MR. SALTMAN: And can we bring up the last e-mail in
13 the chain or the next e-mail?

14 Q. (By Mr. Saltman) What do we see here, Ms. Riley?

15 A. This is the last e-mail from December 17th, 2013. In
16 the highlighted portion of the e-mail, which is from Mr.
17 Kaler to Mr. Bang, Mr. Kaler reports that he has had a phone
18 call with Mr. Capone and Imperium's counsel where Mr. Capone
19 laid out several options with some numbers attached. So
20 Samsung did receive the information from Imperium relating
21 to purchase or license of the patents.

22 MR. SALTMAN: Mr. Rennick, could you please put back
23 up the other slide, please?

24 Q. (By Mr. Saltman) Ms. Riley, what affect does this have
25 on your royalty analysis?

1 A. This certainly confirms my conclusion that Samsung was
2 interested in the Imperium patents, and I think as an area
3 of disagreement, you had heard Dr. Perryman, and I had
4 concluded this, you know, had an upward influence on the
5 royalty rate due to Samsung's extensive use and interest in
6 these patents.

7 You heard Dr. Perryman testify earlier that in his
8 consideration of Factor 11, he didn't see much evidence in
9 the record that would be applicable to that factor. And I
10 think if he had had this information, he might have come to
11 the same conclusion that I did regarding Samsung's interest.
12 So he would have also determined that this has an upward
13 influence on the royalty rate.

14 Q. And does this new information affect your analysis of
15 any of the other factors?

16 A. Well, when we -- when we think about licensing interest
17 in patents on Samsung's part, we need to think about Factor
18 2, which is where we look at rates that Samsung had paid for
19 comparable patents. This is a slide from my presentation I
20 did -- gave to you the other day.

21 XXXXXXXXXXXXX (Redacted pursuant to Court order) XXXXXXXXXXXXXXX

22 XXX

23 XXX

24 XXX

25 further cements my consideration of Factor 2, as well.

1 Q. Ms. Riley, what is your second fundamental disagreement
2 with Dr. Perryman?

3 A. The second fundamental disagreement relates to my use of
4 the ESS/Imperium patent transfer agreement to determine an
5 amount that ESS was willing to accept as a royalty payment
6 for the patents. And this was the 10 percent number that
7 you've heard a lot about.

8 Q. And what's the substance of that disagreement?

9 A. The substance of that disagreement has been
10 characterized by Samsung, and a little bit by Dr. Perryman,
11 as Mr. Blair negotiating with himself. And so -- but we
12 have a situation here where Mr. Blair is involved with ESS
13 and Imperium. They're separate companies. ESS is an
14 operating company. It has over a hundred employees.
15 Samsung is still a customer of ESS to this day, has a
16 factory in California.

17 Imperium is a patent holding company. The companies do
18 have common members of their boards of directors, but they
19 have distinct constituencies. And by constituencies, I mean
20 they have different shareholders.

21 So Mr. Blair is responsible to both groups of shareholders
22 for both parties.

23 Q. And I know it's not uncommon for someone to be a CEO of
24 two different companies. For example, I think Steve Jobs
25 was the CEO of Apple and Pixar, the movie studio at one

1 point. What does someone in that responsibility -- in that
2 position have -- what kind of responsibilities does he or
3 she have?

4 A. Someone in that position has a fiduciary duty to both
5 companies, and this duty means that they have to be fair to
6 both companies. They couldn't enter into a deal that would
7 harm either company.

8 So when Mr. Blair is determining whether to sign this
9 agreement between ESS and Imperium, he looks to his left to
10 the operating company, ESS, he looks to his right to
11 Imperium, the patent holding company, and determines that it
12 would be fair for both parties, which is why I think it's
13 appropriate to use that agreement to set ESS's expectations
14 for a royalty.

15 MR. SALTMAN: And, Mr. Rennick, could we put Ms.
16 Riley's slides back up on the screen, please?

17 Q. (By Mr. Saltman) All right. Ms. Riley, what is the
18 third disagreement between you and Dr. Perryman?

19 A. The third area of disagreement relates to my use of the
20 InfoTrends market research in order to determine
21 Samsung's -- the maximum Samsung would be willing to pay.
22 And these documents -- Dr. Perryman doesn't appreciate the
23 importance of primary research that these InfoTrends surveys
24 represent.

25 Q. What do you mean by primary research?

1 A. Primary research is research -- is new research, and it
2 is where you formulate questions to answer specific
3 questions.

4 These surveys are primary research that are used to
5 discern customer preferences. It uses a methodology called
6 choice modeling. And this type of research is what
7 companies would make decisions on about operations. This is
8 certainly the type of research that companies would use to
9 set themselves apart from the competition or gain an edge
10 over their competitors.

11 Q. How do you know this is primary research?

12 A. It says so right on the front page of the cover page of
13 the survey.

14 Q. We've heard some testimony about 300 percent. What is
15 your opinion of that?

16 A. When we're looking at these purchase drivers, I think a
17 good analogy would be when you go to a restaurant -- I guess
18 Samsung's counsel is trying to say that we have to
19 distribute these purchase drivers among a hundred percent
20 and customers have to pick 10 purchase drivers and
21 distribute the percentages among a hundred percent. But
22 it's like when you go to a restaurant, you can choose
23 between soup, salad, entree, dessert, appetizer. You don't
24 have to choose one of each every time or some portion of
25 each every time.

1 The beauty of this kind of choice modeling is that it
2 lets Samsung know what the implicit -- what the implicit
3 willingness to buy is of the customers, and it lets them set
4 optimal pricing.

5 So that's what choice modeling is used for, and that's
6 why we can look at the number of respondents who said image
7 quality, camera quality, resolution as a purchase driver.
8 That was one of their top three responses, and that's why
9 that's -- that percentage is appropriate to utilize to set
10 what Samsung is willing to pay in this negotiation.

11 Q. Ms. Riley, why did you rely on data from 2012 and 2014?

12 A. Well, certainly, if there were information available
13 from 2007, around the time of the hypothetical negotiation,
14 I would have used it, but there wasn't information from that
15 time period in the record.

16 Q. Now, Ms. Riley, how does this type of primary research
17 contrast with the share of the conversation, perhaps, we saw
18 Dr. Benner use during his testimony and use during your
19 cross-examination?

20 A. Well, the share of the conversation information, if you
21 recall, involves looking at the Internet to see what people
22 are talking about. What are they saying about Samsung
23 products, whether it's good, bad, indifferent?

24 So that type of information is certainly interesting.
25 It certainly is a data point, but it doesn't -- it doesn't

1 carry the same relevance the primary research regarding
2 choice modeling for consumer preferences would -- would
3 yield to Samsung. And it wouldn't be the type of
4 information that you would make business decisions around.

5 Q. So, Ms. Riley, what happens when you correct for these
6 fundamental disagreements with Dr. Perryman?

7 A. Well, my opinion doesn't change for the reasons I have
8 given to you in explaining these fundamental disagreements,
9 differences. I still have the same opinion as to a royalty
10 rate of 7 cents for the interface patent, 4 cents for the
11 preflash patent, and 8 cents for the anti-flicker patent.
12 And those royalty rates would be applied to the number of
13 accused products shown beneath each patent, which I read to
14 you the other day so I won't read again.

15 Q. And, again, why is the preflash -- preflash patent a
16 little lower?

17 A. The preflash patent rate is a little bit lower because
18 only the processor is implicated in infringement, and the
19 profitability on the processor is less than if you had two
20 sensors plus a processor of profit share.

21 Q. Ms. Riley, once again, when you do the math, what do the
22 damages work out to be?

23 A. The damages work out to be \$7,766,317 for the interface
24 patent; \$4,259,217 for the preflash patent; and
25 \$9,000,681 -- excuse me -681,544 dollars for the

1 anti-flicker patent.

2 Q. What do these numbers represent, Ms. Riley?

3 A. These numbers would represent the minimum damages
4 adequate to compensate Imperium for Samsung's infringement
5 of the patents.

6 Q. Thank you very much for the education, Ms. Riley.

7 MR. SALTMAN: Pass the witness, Your Honor.

8 THE COURT: Cross-examination.

9 MR. JENNER: Yes, sir.

10 CROSS-EXAMINATION

11 BY MR. JENNER:

12 Q. Ms. Riley?

13 A. Yes.

14 Q. So we have three principle areas of disagreement that
15 exist between you and Dr. Perryman. So I would like to ask
16 you briefly about each of those three areas.

17 The first two, seems to me, have been covered quite a
18 bit in the prior examination of you and of Dr. Perryman,
19 Those two being the ESS/Imperium agreement as providing the
20 10 percent number for the left side of that chart that I've
21 been using, and the InfoTrends information with the 18.25
22 percent taken for camera resolution. We've had a lot of
23 discussion about those two, correct?

24 A. We have.

25 Q. And then there's this additional matter that you've

1 raised about the e-mails that have come into play. So let's
2 start first -- you have explained your view of the
3 Blair/Blair agreement as one that would be carried out as A
4 practical matter for the best interest of the companies; is
5 that right?

6 A. Yes, I think so.

7 Q. So that when Mr. Blair and himself met for the purpose
8 of putting this agreement together, this was as good as an
9 arm's length transaction because they would have been
10 looking out for both of the Blair/Blair companies pretty
11 much?

12 A. I think it is different than an arm's length
13 transaction.

14 Q. But the fact does remain you don't dispute that, as I
15 characterized it the other day, it's Mr. Blair and Mr. Blair
16 getting together in a room agreeing on how to divide the
17 profits they hope to get from other people, right?

18 A. Right. Looking to his left to ESS to discern what ESS
19 would need to receive through the agreement and looking to
20 his right to Imperium.

21 Q. And I didn't hear you disagree with Dr. Perryman when he
22 testified that the other factor that's not -- that's not
23 present here is Mr. Blair and Mr. Blair actually negotiating
24 at arm's length with a manufacturing company that's going to
25 have to agree to pay the royalty. There's no BlackBerry,

1 LG, Apple, or anybody else in the room with Mr. Blair and
2 Mr. Blair when they're making their little agreement, is
3 there?

4 A. No. Those companies have separate agreements.

5 Q. All right. So that hasn't changed and that, I think,
6 focuses it pretty -- pretty well for the jury whether your
7 explanation of why continued reliance on the ESS/Imperium
8 agreement, which I have characterized as a non-arm's length
9 transaction between Mr. Blair and Mr. Blair, is not reliable
10 as a way of determining what the lower-bound royalty would
11 be when there's no potential licensee in the room
12 essentially negotiating back. Are you with me? That's the
13 dispute for the jury.

14 A. I -- I suppose so.

15 Q. Okay.

16 A. Whether the jury would think it's appropriate to set
17 ESS's expectations as to a reasonable royalty.

18 Q. Right.

19 A. That's the question.

20 Q. Right. So that's where that one sits. We -- we submit
21 that it is unreasonable to rely on the Blair/Blair
22 agreement, and you submit that it is reasonable to agree on
23 it, and that's where that is?

24 A. Okay. I agree.

25 Q. Okay. The second one we've talked about at some length,

1 and perhaps we can help here to address this --

2 MR. JENNER: If you could bring up Exhibit --
3 Plaintiff's Exhibit 50 at Page 21?

4 Q. (By Mr. Jenner) This is the InfoTrends report from
5 January 2014 that we've talked about, and it's got on 21,
6 one of the camera resolution lines that you rely on, the
7 one -- sixth down. It's 19.7 percent here. It was 16 point
8 something percent in the other InfoTrends agreement,
9 arriving at an 18.25 percent average?

10 A. Yes, sir.

11 Q. And that's what you used?

12 A. Yes, sir.

13 Q. And so what I heard you testify about and to explain to
14 the jury is why they should disregard the fact that the
15 numbers don't add up to 300 percent. Because when you go
16 into McDonald's, you can choose a hamburger, a diet Coke,
17 fries, and maybe even something for dessert. You can make
18 multiple choices. But the fact of the matter is these
19 numbers just don't add up to a hundred percent.

20 A. No. And they won't as -- as a function of choice
21 modeling.

22 Q. Right. So this -- this is not a situation where we have
23 a hundred percent responses, and you can look to see what
24 percent of a hundred percent were interested in the feature
25 and know who the ones were that were interested if this had

1 been one choice being made, and then 19.7 percent of a
2 hundred choices, you'd know how many were made that were
3 just out of a hundred percent. We can't get that, can we?

4 A. No, this is actually more powerful than the information
5 you describe.

6 Q. All right. I understand you -- you think that. You did
7 not, to my hearing, address some of the other issues, the
8 issue, for one, that camera resolution, as defined on a
9 later page of this document that we've looked at, is all
10 about pixel resolution. We did see a reference in the other
11 document that some people use camera resolution and think of
12 camera quality. But, of course, camera quality isn't the
13 same thing as image quality, is it?

14 A. Well, I think Dr. Perryman agreed during his testimony
15 that resolution could be used as a yardstick for image
16 quality.

17 Q. Some people think it --

18 A. That is how -- I'm sorry. Go ahead.

19 Q. No, go ahead.

20 A. But that is how customers might think about. So I think
21 that might be another area of agreement between us.

22 Q. Actually, I think he said some customers, but I also
23 think he said that there is no way to derive from camera
24 resolution anything about image quality, much less about the
25 features of the three patents-in-suit. And we're still left

1 with the problem that this entry for camera resolution
2 doesn't tell you anything about how many people might be
3 interested in any of the three features of the patents,
4 right?

5 A. Right. I discussed the other day that a document like
6 this, which is marketing focus, would not be using patent
7 language for customers to --

8 Q. So --

9 A. -- you know, to perform the choice modeling when they're
10 picking their top three purchase drivers.

11 Q. Right. So this still doesn't get us to the point of
12 being able to derive anything about consumer interest in the
13 three features of the patents-in-suit from that number. We
14 just don't know?

15 A. Well, we just have to look at the benefits taught by the
16 patents, which are image quality, as we've heard, and that
17 is the link that allows us to use this information with
18 camera resolution being a yardstick for camera quality, and
19 image quality being the result -- you know, equivalent to
20 camera quality.

21 Q. And we also have a lot of evidence that there are
22 dozens, if not hundreds or thousands, of other features in
23 the image sensor that contribute to the value of the image
24 sensor, right?

25 A. We've heard some reference to different functionalities

1 of the image sensor that are not accused.

2 Q. Right.

3 A. What I discussed in my consideration of Georgia-Pacific
4 Factor 3.

5 Q. Right.

6 A. Non -- go ahead.

7 Q. No, no, I'm sorry. I thought you were done.

8 A. Which requires consideration of non-patented
9 functionalities that are contributed by Samsung.

10 Q. And there's also the co-related requirement that was
11 referred to of having to allocate for the smallest saleable
12 unit the patented feature from the other features that are
13 in the smallest saleable unit, correct?

14 A. Yes. Dr. Perryman and I agree on the smallest saleable
15 unit in this case.

16 Q. And the requirement to allocate?

17 A. I'm sorry?

18 Q. And the requirement to allocate?

19 A. We agree the smallest saleable unit are the sensors and
20 processors. I perform my allocation of profitability
21 through utilization of the Georgia-Pacific Factors, one of
22 which requires consideration of the additional non-patented
23 functionalities you discuss.

24 Q. And you did not have a way to allocate how much of a
25 feature like camera resolution should be attributed to the

1 patents-in-suit, as opposed to all the other features that
2 go into camera resolution, correct?

3 A. Well, camera resolution is camera resolution. It's
4 defined by the pixels.

5 Q. I -- I don't think you've answered my question. You
6 have -- you have not a way -- you have not been able to
7 allocate out of that percentage how much of it should be
8 attributed to the contribution of the three patents-in-suit
9 versus how much of it should be allocated to all other
10 contributions in the image sensor?

11 A. Well --

12 Q. You can't do that, can you?

13 A. -- for the profitability of up to 74 cents, Samsung
14 keeps all but 7 cents, 4 cents, or 8 cents, depending on the
15 patent, and that is the portion that is attributable to
16 non-patented elements.

17 Q. Is that what you did? You took 74 cents' worth of
18 profitability for the sensor, then you took 18.25 percent of
19 that, and attributed it to all of camera resolution. So you
20 didn't take anything out of that for all the other features,
21 did you?

22 A. Well, I think that's fair. I'm sorry, it would be the
23 portion of that profit that is available to share as a
24 royalty, so that 13 -- the range between 4 cents, for
25 example, on the preflash patent and 13 cents that Samsung

1 keeps under the structure of my analysis. That saved
2 profit, retained profit, the 8 cents -- I'm sorry, am I
3 doing my math right? 8 and a half cents, 9 cents, is what
4 represents the portion Samsung gets to keep for its
5 contributions that are outside of the teachings of these
6 patents.

7 Q. And I'm glad you said that because then Dr. Perryman
8 showed that when you add up the three royalty rates you get
9 for the three patents-in-suit, you get a number that's
10 bigger than all of the money that was attributed to camera
11 resolution. There isn't any money left over for the other
12 features, is there?

13 A. Well, it depends on which components are implicated in
14 the infringement --

15 Q. What's --

16 A. -- and also -- I'm sorry, go ahead.

17 Q. I thought you were done. Sorry. Go ahead.

18 A. We also have three separate patents which are accused of
19 infringement, so it is an analysis of three unique
20 inventions that are taken -- the conversation around which
21 is formulated by using the same profit range.

22 Q. But the fact of the matter, based on what you just said,
23 is for the huge number of the products here that are accused
24 of infringing all three patents, they will be, under your
25 model, liable for all three royalties which is 4 and 7 is

1 11, and 8 is 19 cents. That's bigger than the entire amount
2 of money that you attributed to that camera resolution
3 factor, which was 13.5 cents.

4 You are not holding -- not leaving money left over for
5 all of the other features that make up camera resolution.
6 You're actually taking money away from other areas because
7 your royalty for those three patents is bigger than what you
8 attributed to camera resolution, right?

9 A. I think we'll have to disagree for the reasons I've
10 explained.

11 Q. Okay. I think we've covered that one.

12 The last point that you raised was that the e-mails
13 that you referred to show in a different light that Samsung
14 had a substantial interest -- I won't call it substantial.
15 Had an ongoing interest in acquiring the Imperium patents as
16 a measure of the patents being valuable; is that right?

17 A. Yes. The measure of the value of Samsung's use of the
18 patents, correct.

19 Q. All right. Since you've raised this new issue about
20 Samsung e-mails showing Samsung's interest in Imperium's
21 patents, let's take a look at that. Let's start -- before
22 we come up to the e-mail that you have -- with Defendant's
23 Exhibit 525.

24 MR. JENNER: Can we bring that up?

25 Q. (By Mr. Jenner) Now, 525 is a little chain of e-mails,

1 the most recent one, of course, being on top. So the most
2 recent one is from Stuart Kaler to somebody on June 11th,
3 2011. Do you see that?

4 A. Yes.

5 Q. And Stuart Kaler is the so-called patent broker?

6 A. Yes.

7 Q. Right?

8 A. Yes.

9 Q. And he's communicating with some people at Samsung. In
10 this particular top e-mail, it's somebody named Jun, and
11 it's somebody named Jongsoo, correct?

12 A. Yes.

13 Q. So I would like you to look at one of the earlier
14 e-mails first -- go to the second page, please. And toward
15 the bottom there's an e-mail that starts on Thursday, May
16 26th, and it runs down for the rest of the page. Okay. Do
17 you see that e-mail?

18 A. Yes.

19 Q. That's an e-mail from Stuart Kaler to Jun and Jongsoo,
20 correct?

21 A. Yes.

22 Q. That's an e-mail to Samsung, not from Samsung?

23 A. Yes, I had seen this previously.

24 Q. Good. That will help. So this is a meeting where Mr.
25 Kaler is reporting that he was given a number from Imperium

1 about what Imperium would like for its patent portfolio,
2 right?

3 A. Yes.

4 Q. And the number that he is given that Imperium wants for
5 the portfolio is 400 million U.S. dollars, correct?

6 A. Yes.

7 Q. So step 1, May 2011, Imperium wants \$400 million. Whole
8 lot of money, right?

9 A. That is a lot of money, yes.

10 Q. Now, let's go back to Page 1 of this same exhibit and
11 look at the second e-mail on the page where there is a
12 response starting with the words, "on Thursday, June 2nd."

13 Do you see that?

14 A. Yes.

15 Q. And this is a response, again, from Stuart Kaler going
16 to Jun and Jongsoo, correct?

17 A. Yes.

18 Q. So this -- once again, this is the -- the broker
19 reporting back. And in the second paragraph, he says: I
20 informed Imperium that my client is not finding agreement
21 with the \$400 million number that Imperium proposed.

22 Correct?

23 A. Yes.

24 Q. I said that my client's thinking is at least in order of
25 magnitude lower at this point in time. Imperium interpreted

1 this to mean \$40 million, but I said I don't think there's
2 any hard number that my client has agreed to as yet. Do you
3 see that?

4 A. Yes.

5 Q. So at this point in time, the broker is reporting back
6 to Samsung that Samsung has told Imperium, no to \$400
7 million; isn't that right?

8 A. Yes. And this is all information that was available
9 previously.

10 Q. Right. We're going to see where this takes us into your
11 e-mail. Now, would you look next at Exhibit 526, please?

12 These are later e-mails than the ones I just showed you in
13 525, correct? The top one is -- now it's June 21st, 2011?

14 A. Yes.

15 Q. And the one that's interesting here is the first one
16 that starts at the top of the page. It's from Stuart Kaler,
17 the broker, June 21st, 2011, and it runs halfway down the
18 page, "the very best regards, Stu." Do you see that?

19 A. Yes, I do.

20 Q. So this is another one from the broker, reporting back
21 to Samsung, correct?

22 A. This is from Mr. Kaler, the broker, that Samsung engaged
23 to have these discussions with Imperium.

24 Q. Right.

25 A. And he is writing Samsung, yes.

1 Q. In the first paragraph, he reports he called Imperium
2 and left a voicemail.

3 In the second paragraph, which is the one of interest
4 here, he says: At the end of my business day, 5:00 p.m.,
5 Imperium called me to say that he -- he had a quick -- he
6 had a meeting with Imperium's board and CEO. Imperium
7 wanted to, quote, to price the package deal on the portfolio
8 for a quick exit, close quote. With that, Imperium said
9 that Imperium was proposing, presumably to my client and all
10 other interested parties, a deal of one-third of the
11 original asking price, which by my calculations makes --
12 makes it one-third of 400 million, or about 133 million,
13 plus some form of participation. Do you see that?

14 A. Yes.

15 Q. So now, as of June 21st, 2011, the report is that
16 Imperium has come off of \$400 million and now will take a
17 deal for \$133 million. Do you see that?

18 A. Yes. That's what Mr. Kaler is reporting to Samsung.

19 Q. And this is one of the things that you had known about
20 before?

21 A. Yeah, I knew that there were discussions in 2011.

22 Q. But the price didn't stop -- come plunging down from a
23 hundred -- from 400 to 133 million, did it?

24 A. I don't -- I don't know. I don't remember exactly. I
25 assume we're going to see.

1 Q. You'll find out right now.

2 A. Yes.

3 MR. JENNER: Could we have Defendants' Exhibit 165,
4 please?

5 Q. (By Mr. Jenner) Defendant's 165 is another series of
6 e-mails between Mr. Kaler, the broker, and people at
7 Samsung. Let's turn to the fourth page of e-mails and look
8 at the one at the bottom, June -- if I'm reading this right,
9 July rather, July 25, 2011. And it's Stuart Kaler writing
10 back to Jun and Jongsoo, again, at Samsung, right?

11 A. I lost the signature, but, yes, it's from Stuart Kaler,
12 yes, to Jun and Jongsoo.

13 Q. And this is about a month after the last one I showed
14 you in Exhibit 526 where there's -- the report that Imperium
15 would take 133 million. Remember that?

16 A. Yeah, we're still in 2011.

17 Q. Right. So now in July of 2011, Stuart Kaler reports to
18 Jun and Jongsoo: Thank you for your e-mail and letting me
19 know where Samsung's interest lies with respect to Imperium.
20 I understand Samsung's position, and accordingly, I will not
21 pursue this case further, unless Samsung changes its
22 position.

23 Do you see that?

24 A. Yes, I do.

25 Q. That makes it sound like Samsung doesn't have any

1 interest in Imperium's numbers, does it?

2 A. And that was the testimony that we heard from Mr. Bang,
3 that he said essentially thanks but no thanks in 2011.

4 Q. Now go up to the top of the page, and there's an August
5 26th, 2011, e-mail, again, from Stuart Kaler to the people
6 at Samsung?

7 A. Yes, sir.

8 Q. Do you see that?

9 A. Yes, I do.

10 Q. And the first paragraph says: Oddly enough, I received
11 a call, out of the blue, from Alan Fisch, attorney
12 representing Imperium Holdings. Imperium mentioned that
13 Imperium would be happy to entertain any offer -- any in
14 exclamations -- for any -- in exclamations -- of its patents
15 and their portfolio. Do you see that?

16 A. I do.

17 Q. Any offer for anything, they would be happy to entertain
18 it, right?

19 A. Any offer for any of its patents in their portfolio.

20 Q. And then two paragraphs below that it says: With that,
21 Imperium is inviting my client to cherry-pick the
22 portfolio -- that is, make an offer on any subset of patents
23 that are there. And make an offer. Is that something that
24 the business unit would want to do?

25 You see that?

1 A. I do.

2 Q. So that sounds like, doesn't it, that Imperium is now
3 saying make us an offer. Offer us something, anything for
4 any of the patents, but we'll consider anything you have to
5 say, right?

6 A. Any offer for any of the patents, yes.

7 Q. So so far we've gone from a -- a powerful \$400 million
8 demand, rejected to \$133 million demand for these patents,
9 rejected, to please give us anything, we'll entertain any
10 offer. Is that about it so far?

11 A. So far I think your characterization is -- is fair
12 enough.

13 Q. All right. Now, let's look at the e-mail that you
14 relied on. Brings us to your Exhibit 768.

15 MR. JENNER: Can we have 768 up? Is this it?

16 Q. (By Mr. Jenner) Okay. So starting from the last page,
17 I'd like to explore whether this really shows any interest
18 on the part of Samsung or not.

19 The e-mail at the bottom of the page is July 25th,
20 2011, from Stuart Kaler to Samsung. This is the one that
21 says in the second paragraph: I understand your position.
22 I won't pursue it further. Right? We saw that?

23 A. Yes.

24 Q. And the one above that is the one that Stuart Kaler sent
25 to Samsung saying: Imperium will entertain any offer at

1 all. Make us -- make them an offer. We just saw that one?

2 A. Yes, we did.

3 Q. Now, look at the next e-mail that starts at the bottom
4 of Page 7 of this chain. This one now is from Samsung to
5 Stuart, right, on August 31st, 2011? This is from Jun,
6 who's at the top of the next page, to Stuart, right?

7 A. Yes. This is one we had seen previously.

8 Q. And let's see what it says: Unfortunately, our position
9 has not changed since our last correspondence regarding
10 these patents. And that's the Imperium patents, right?

11 A. I think so, yes.

12 Q. In other words, thanks but no thanks. When you get a
13 chance, let me know how things are with you.

14 So wouldn't you agree with me that as of this e-mail,
15 Samsung continues to have no interest at all in buying
16 Imperium's patents?

17 A. And this is what Mr. Bang testified to.

18 Q. Right.

19 A. In 2011, thanks but no thanks was said.

20 Q. Now, the next e-mail up is July 5th, 2012, and now it's
21 from the broker, Stuart Kaler, to Jun at Samsung who says he
22 received a phone call from Imperium, talking about a legal
23 proceeding called a Markman proceeding. Do you see that?

24 A. Yes, I do.

25 Q. Which they thought had gone well in the litigation at

1 that time, and Imperium wants to know if the client, which
2 they suspect is Samsung -- never confirmed that -- would
3 have any interest in a deal for the portfolio. Kaler asked
4 Imperium if Imperium had a specific proposal to offer, and
5 there was some discussion about whether any might be
6 forthcoming.

7 Then there's an action item to Samsung: Please let me
8 know if Samsung has interest in engaging in any discussions
9 with Imperium for the portfolio. You see that?

10 A. Yes, I do.

11 Q. So that's a request from the broker to Samsung to find
12 out whether their zero value interest has changed, right?

13 A. He's asking to please let me know if Samsung has
14 interest in engaging in any discussions.

15 Q. Right. So the question is: Will you go from zero to
16 interest in the portfolio?

17 A. Oh, what do you mean zero? You mean the thanks but no
18 thanks to --

19 Q. Right.

20 A. Okay.

21 Q. Isn't thanks but no thanks we're not going to pay
22 anything?

23 A. Yeah, thanks but no thanks is we're not going to do the
24 deal.

25 Q. Right. So no interest in paying anything to Imperium to

1 being asked do you want to reconsider?

2 A. Yes.

3 Q. Then the e-mail above that, another one from Stuart
4 Kaler saying: I'm resending this e-mail in the off chance
5 you didn't see it. Imperium has asked me to try to get
6 information on interest in the Imperium portfolio. Is
7 Samsung exploring this, or is there no further interest?

8 So the broker is still trying to find out, and Samsung
9 is still at zero, right?

10 A. Samsung has not replied.

11 Q. Right. So there's no change in Samsung's position, no
12 interest.

13 Then there's another e-mail above that. It starts at
14 the bottom of the next page, and that one is still from
15 Stuart Kaler, July 12th, 2012, regarding another call. And
16 he's asking Samsung again -- he's asking Jun, do you have an
17 update for me to pass along to Imperium?

18 Still no indication of interest by Imperium, correct?

19 A. By Samsung.

20 Q. By Samsung rather, correct?

21 A. They have not responded.

22 Q. So at this point in time, there's nothing that Samsung
23 has said that changes their valuation of these patents above
24 zero, correct?

25 A. Well, they haven't said anything, so we don't know

1 what's going on.

2 Q. Still thanks but no thanks, right?

3 A. They haven't said anything. I mean --

4 Q. Okay. Now, the next e-mail, July 11th, 2012, is from
5 Samsung to Kaler. I'll ask and get back to you shortly. We
6 may need a couple of days to reopen and review. Is there
7 any additional information since the last time, which
8 Imperium can share with us, to assist a re-review of the
9 portfolio?

10 So they're just saying, is there anything you've got to
11 tell me, right?

12 A. Yes, that's correct. We need to reopen the file, so to
13 speak.

14 Q. Then the next e-mail is July 12, 2012, and that is from
15 the broker still to Samsung, saying that Imperium had
16 called, thought the client might have some interest because
17 they think they're going to get some favorable legal ruling.
18 No hard sale.

19 Imperium, in the third paragraph, was trying to give me
20 the impression that Imperium would accept a reasonable
21 amount to sell the portfolio. I don't know what reasonable
22 is, in the fourth paragraph.

23 And then the fifth paragraph it ends: Is there
24 anything specific you would like me to ask? And then the --
25 the e-mail above that one is the one you referred to, I

1 believe. That's a July 12th, 2012, e-mail from Samsung --
2 I'm sorry, yes, from Samsung to Kaler saying: Can you
3 clarify something. And it's a question about the
4 litigation. It talks about the latest order, fact
5 discovery, no mention of the so-called Markman hearing. And
6 he just asks him to check.

7 Now, that doesn't say anything about anybody being
8 willing to pay money, does it? It's just asking for
9 information?

10 A. Right. Mr. Kaler was saying, what do you want me to
11 find out. And he -- Samsung says: Here's what we'd like
12 you to find out. And this is in 2012. So this is the new
13 information. We had previously thought Samsung said thanks
14 but no thanks in 2011.

15 Q. Right. I grant you --

16 A. There's --

17 Q. -- new information. We all know that. But it doesn't
18 say anything about Samsung changing its mind and -- and
19 saying we might be willing to pay money, does it?

20 A. No. It just says Samsung's interested in learning more.

21 Q. About the lawsuit that's going on?

22 A. That is the specific question that's being asked, yes.

23 Q. Now, if we turn to the top of Page 4, there is an e-mail
24 from Mr. Kaler to Samsung saying that he'd read some
25 information about people moving around. And he asked

1 whether Imperium was -- was going to remain involved. No
2 answer. And there's just nothing in there one way or the
3 other about anybody being interested in paying money, is
4 there?

5 A. This looks like information from Mr. Kaler to Mr. Bang
6 at Samsung.

7 Q. Certainly nothing about Samsung being interested in
8 changing its mind and paying money?

9 A. I don't see any discussion of money.

10 Q. All right. Now let's go to the bottom of Page 3, and
11 here's the October 31, 2013 e-mail. This is another one
12 that you referred to in your direct testimony, but this is
13 another one from the broker to Samsung, correct?

14 A. Yes, it is.

15 Q. And you referred to the fourth sentence as -- the fourth
16 paragraph, I should say, as Imperium tells me the next phase
17 for Imperium is to sue Samsung. Okay. And then the two
18 paragraphs after that, instead of initiating suit, Imperium
19 thought this might be a good time to reconnect.

20 But in the last sentence that you didn't quote, once
21 again, the broker says to Samsung "please let me know if you
22 would like to open up dialogue with Imperium through me."

23 Right?

24 A. Correct.

25 Q. So this is yet again a request from the broker to

1 Samsung to see if Samsung wants to change its mind, which
2 for the last two years it hasn't done at all, right?

3 A. They have asked for more information. We just weren't
4 aware that they had asked for more information previously.

5 Q. Right. There -- there's no suggestion here that Samsung
6 has taken a different position about the value of the
7 Imperium patents than it took two years earlier in 2011.

8 A. There's no suggestion that they're willing to do a deal.

9 Q. Now go up an e-mail at the top of the page. Here's an
10 e-mail from Stuart Kaler, the broker, again to Samsung. And
11 it says "just checking in, and once again are you thinking
12 of a potential response to Imperium." Do you see that?

13 A. Yes, I see that.

14 Q. So once again, it's still the broker doing what he's
15 been doing for years, maybe trying to make some money,
16 asking Samsung, are you -- are you willing to change your
17 mind and consider paying for these patents. He's still
18 asking, right?

19 A. He's checking in to see if Samsung received the last
20 e-mail. Do you have a response.

21 Q. Now look at the bottom of Page 2. This is another one
22 you referred to. This is a response from Samsung to Kaler
23 kind of like the one we saw a year ago saying "I need time
24 to revisit this. Will get back to you soon." Right?

25 A. Yes, that's what Mr. Bang is telling Mr. Kaler.

1 Q. So he's just saying, as he did in an earlier e-mail we
2 looked at, I'll look into it, I'll get back to you. Kind of
3 like don't call me, I'll call you.

4 A. Well, my point is that we did not realize that Samsung
5 was discussing this, anything about Imperium with Mr. Kaler
6 in --

7 Q. And I don't --

8 A. I'm sorry. Go ahead.

9 Q. No, no. Go ahead.

10 A. In the 2013 time frame or in the 2012 time frame.

11 Q. And I don't dispute with you that that is absolutely
12 true. This is new information that Samsung and the broker
13 are having these back and forths. But it continues to be
14 the fact that Samsung's position has not changed one iota
15 from two years earlier. It has not suggested it's willing
16 to pay anything for these patents, right?

17 A. I think if we read the e-mails on their face, we
18 don't -- we don't know. They're going to revisit the issue.

19 Q. They're going to revisit the issue like --

20 A. We don't know --

21 Q. -- like you and I going to revisit the issue. They say
22 they're going to do it and we'll get back to you. That's
23 what they say, right?

24 A. He says we're going to revisit the issue and we'll get
25 back to you. I think that's what we can determine they're

1 going to do.

2 Q. Well, let's see how he gets back to them. The next
3 e-mail up on the page, Wednesday, November 13th, 2013, the
4 broker Kaler, Stu, keeps at it. He's determined, if nothing
5 else. And he writes to Samsung again and says "any further
6 thoughts on how to respond to Alan? Please let me know at
7 your earliest convenience." Do you see that?

8 A. Yes, I do.

9 Q. Once more, an inquiry from the broker to Samsung, no
10 indication that Samsung has changed its position at all,
11 right?

12 A. We don't know their thoughts.

13 Q. Right. And then above that, my god, if it isn't Stuart
14 Kaler again on November 26th, 2013 writing to Samsung:
15 "Imperium pinged me today to inquire whether my client has
16 any thoughts. Do you have any instructions for me?" From
17 the broker. Do you see that?

18 A. Yes, I do.

19 Q. Anything there suggesting that Samsung has changed its
20 position about the value of these patents?

21 A. We can't tell. There's no response.

22 Q. There is no response. Exactly. To every one of these
23 pings, poor Mr. Kaler, just trying to make a buck, can't get
24 a response because Samsung isn't saying, yeah, we're
25 interested, are they?

1 A. All we know is that they're revisiting it and they need
2 time.

3 Q. Right. And then if we go to the first page -- and we're
4 almost done -- the e-mail at the bottom of the page that you
5 referred to, December 4th, 2013, again it's from the broker.
6 It's from poor Mr. Kaler to Samsung saying "Imperium has
7 asked me to come with him and Imperium's general counsel for
8 dinner. They would like to present pricing options."

9 Imperium would like to present pricing options. "It's my
10 impression Imperium would like to strike a deal. I'll
11 attend the dinner and report back to you. But do you have
12 any feedback or instructions for me?"

13 Fifth, sixth consecutive e-mail. Any instructions?
14 And notably, nothing from Samsung, is there?

15 A. They have not responded.

16 Q. No response to any of these things?

17 A. Just the one that we saw where they're revisiting the
18 portfolio.

19 Q. They're looking at it and we'll get back to you. I
20 can't think of how many thousand times I've said that. Have
21 you said that to people a lot? I'll check into it and I'll
22 get back to you?

23 A. In what context?

24 Q. Any context? Haven't you ever said that? No?

25 A. I try not to.

1 Q. Oh, okay. And let's look there at the last e-mail on
2 the page, the one at the top. This is the last of the ones
3 that you referred to. This is Tuesday, December 17th, 2013,
4 and again, it's from poor Stuart Kaler to Jun at Samsung.

5 "The dinner didn't take place. The general counsel couldn't
6 leave the East Coast." Okay. "I had gotten off a telephone
7 conference with them", and the last sentence: "If you want
8 to know more, I invite you to call me at your convenience."

9 So once again, we have the broker trying to gin up some
10 interests and not a whit of a response from Samsung,
11 correct?

12 A. There's -- they have not responded.

13 Q. There is absolutely nothing here that shows any
14 deviation of Samsung's position from 2011 that they're not
15 willing to make an offer on anything, it's still thanks, but
16 no thanks, right?

17 A. I think I would dispute that characterization of the
18 e-mails, because, as Mr. Bang testified, we said thanks but
19 no thanks in 2011. We can see from these e-mails Samsung
20 did communicate with its broker, did respond to him
21 occasionally to say we're revisiting this. We need more
22 information on the Markman hearing. That's the new
23 information we have.

24 Q. Don't you agree with me that Samsung's position from
25 2011 until today in the context of these e-mails, insofar as

1 it affects your position that Samsung placed value on these
2 patents, is wrong, that Samsung placed no value on these
3 patents?

4 A. I disagree.

5 Q. You disagree?

6 A. Yes.

7 Q. Okay. And then just to close this, I take it then that
8 you as the damages expert for Imperium want your position to
9 be known to the jury that you think these e-mails show some
10 interest on the part of Samsung in paying value for these
11 patents? That's your position?

12 A. They show that Samsung continued its dialogue with
13 Imperium through its broker in 2012 and 2013.

14 Q. "We'll get back to you." That's what they said.

15 A. They said we're revisiting this, we need time.

16 MR. JENNER: No further questions.

17 THE COURT: Anything additional?

18 MR. SALTMAN: Yes, Your Honor.

19 REDIRECT EXAMINATION

20 BY MR. SALTMAN:

21 Q. Ms. Riley, did Samsung hire Mr. Kaler to negotiate on
22 behalf of Samsung?

23 A. Yes.

24 Q. Did they sign him to a contract to do that?

25 A. Yes.

1 MR. SALTMAN: Mr. Rennick, can you please pull up --
2 Mr. Rennick, can you please pull up PX-768, please?

3 Q. (By Mr. Saltman) Ms. Riley, you understand that this
4 document was first given to Imperium on Wednesday night at 2
5 a.m. approximately?

6 A. Yes.

7 Q. And are you aware that Imperium asked for these
8 documents back in July of last year?

9 A. Yes.

10 Q. Now, on Page 1 in the top e-mail it says "if you want --
11 if you want to know more, I invite you to call me at your
12 convenience." Do you see that?

13 A. Yeah.

14 Q. And that's asking Mr. Kaler to -- it's Mr. Kaler asking
15 Mr. Bang to give me a call at some point, right?

16 A. Yes.

17 Q. And we don't know if Mr. Bang ever called Mr. Kaler,
18 right?

19 A. We don't -- I don't know.

20 Q. And that's because at Mr. Bang's deposition, Imperium
21 didn't have the opportunity to ask him questions about these
22 documents, right?

23 A. I -- I believe so.

24 Q. And I believe counsel talked to you a bunch about
25 Samsung's thoughts on these patents in 2012 and 2013.

1 A. Yes.

2 Q. We don't know Samsung's thoughts on these patents at
3 that time, right?

4 A. No, we don't.

5 Q. And why didn't we know that?

6 A. Well, Mr. Bang wasn't asked about these e-mails at his
7 deposition.

8 Q. Because they weren't available, right?

9 A. That's correct.

10 Q. So Imperium couldn't ask any Samsung witness about these
11 documents until 2:00 a.m. -- after 2:00 a.m. on Wednesday,
12 right?

13 A. Correct.

14 Q. We could have asked Mr. Kaler about these documents if
15 he had been here, correct?

16 A. If he had been here, yes.

17 Q. And you understand Mr. Kaler was on the witness list for
18 Samsung? Do you understand that?

19 A. I do have that understanding.

20 Q. And Mr. Kaler was taken off Samsung's witness list last
21 night, right?

22 A. Yes, I understand that.

23 Q. So Samsung decided not to call Mr. Kaler to explain
24 these e-mails, right?

25 A. I -- I think so.

1 MR. SALTMAN: Thank you very much, Ms. Riley.

2 MR. JENNER: Your Honor, could we approach
3 a moment?

4 THE COURT: Yes.

5 (Off the record bench conference.)

6 THE COURT: Any additional questions? If
7 you will turn your mic on.

8 RECROSS EXAMINATION

9 BY MR. JENNER:

10 Q. Just one more question, and that is, in your capacity as
11 the testifying expert on damages for Imperium, is it your
12 position that this string of e-mails justifies taking the
13 position that Samsung had placed substantial value on these
14 patents?

15 A. It's further confirmation that my opinion regarding
16 Georgia-Pacific Factor 11 is correct, has a strong upward
17 impact on the royalty.

18 Q. That really didn't answer my question.

19 A. Oh, I'm sorry.

20 Q. My question is: Is it your position as the testifying
21 expert on damages for Imperium that this string of e-mails
22 justifies taking the position that Samsung had placed
23 substantial value on these patents?

24 A. It's further justification for that position, as shown
25 in my demonstrative.

1 MR. JENNER: Okay. Thank you.

2 No further questions.

3 THE COURT: Anything further?

4 MR. SALTMAN: Nothing further, Your Honor.

5 THE COURT: You may step down, ma'am.

6 Thank you.

7 What says Imperium?

8 MR. FISCH: Your Honor, Imperium rests.

9 THE COURT: And then what says Samsung?
10 Of course, for rebuttal on the issue of invalidity.

11 MR. HARNETT: No rebuttal, and we renew our Rule 50
12 motions.

13 THE COURT: Okay. Those will be denied.

14 So both sides close?

15 MR. FISCH: Correct, Your Honor.

16 MR. HARNETT: (Nods head affirmatively).

17 THE COURT: If counsel would just approach
18 a second.

19 (Off the record bench conference.)

20 THE COURT: Okay. Ladies and gentlemen,
21 thank you for being so attentive.

22 I had to discuss the game plan with the attorneys to
23 give you further instructions. We're going -- I'm going to
24 be sending you home, which is probably what you expected,
25 but I wanted to give you instructions for Monday.

1 Of course, you've now heard all the evidence and the
2 evidence is closed, but it's very important that you don't
3 start thinking about -- of course, not talking about it or
4 even thinking about anything, about decisions that have to
5 be made in this case, until after you hear the argument of
6 counsel on Monday and then not until my final instructions.
7 And so Monday will be the time that you will finally get the
8 case and be able to make the decisions that we've asked you
9 to make.

10 So please don't discuss the case among yourselves or
11 anybody else. Monday if you want to come in -- I'm going to
12 have you come in for 9:30, and so then just to give you a
13 little more extra time since I've been taking time away from
14 you here working later. Then we'll come back at 9:30 and
15 have the argument of counsel and then my instructions and
16 then the case will be yours to decide at that point.

17 So have a nice weekend, a safe drive and we'll see you
18 Monday at 9:30.

19 COURT SECURITY OFFICER: All rise.

20 (Jury out.)

21 THE COURT: Please be seated.

22 Y'all said you wanted to -- you said there were some
23 other issues you wanted to raise in terms of any other
24 motions you wanted to make at this time.

25 MR. SIGLER: We have some Rule 50 motions, Your

1 Honor, we would like to make orally.

2 THE COURT: That's fine.

3 MR. SIGLER: Mr. Battaglia will be
4 addressing those.

5 MR. BATTAGLIA: Good evening, Your Honor.

6 Imperium respectfully moves for judgment as a matter of
7 law on the MIPI license defense, the affirmative defense
8 that -- for which I don't think there was any evidence at
9 all. It wasn't mentioned in opening and wasn't pursued at
10 all, and for that reason, we respectfully request, since
11 it's their burden and there being no evidence, that judgment
12 as a matter of law should be granted on this MIPI license
13 defense.

14 Mr. POST: Your Honor, Samsung withdraws
15 the MIPI license defense.

16 THE COURT: I'm not sure the mic was on.

17 MR. POST: I think someone stole mine.

18 THE COURT: You have to turn that mic on
19 as well. There's a button at the bottom of the
20 base.

21 MR. POST: Thank you, Your Honor.

22 THE COURT: Okay. Very good. We will take that out
23 of the proposed charge.

24 MR. BATTAGLIA: Thank you, Your Honor.

25 THE COURT: And I'll grant that since they

1 have conceded and they've withdrawn that.

2 MR. BATTAGLIA: Thank you. And, Your Honor, Imperium
3 also respectfully moves for judgment as a matter of law with
4 respect to their affirmative invalidity defenses, anticipation
5 and obviousness. No reasonable jury could find by clear and
6 convincing evidence, based on the evidence presented, that they
7 had established and met their clear and convincing evidence
8 burden with respect to those defenses.

9 MR. POST: Your Honor, Samsung opposes that motion,
10 has its own corresponding motion for judgment as a matter of
11 law, that no reasonable jury could find the patents not
12 invalid.

13 THE COURT: I deny both of those motions.

14 Anything else?

15 MR. BATTAGLIA: Nothing from Imperium.

16 THE COURT: Anything from Samsung?

17 MR. POST: Yes, Your Honor. Samsung renews its
18 motions for judgment as a matter of law of non-infringement, no
19 willfulness and no damages that were made at the close of
20 Imperium's case-in-chief, Your Honor.

21 THE COURT: I understand and I overrule those.

22 I'm sorry. I didn't give you a chance to respond. Did
23 you want to respond?

24 MR. BATTAGLIA: No, Your Honor.

25 MR. POST: Thank you, Your Honor. I don't believe we

1 have any more at this point.

2 THE COURT: Okay. Any other questions
3 about anything?

4 MR. SALTMAN: One minor point, Your Honor. I think
5 Dr. Perryman's CV, which I think was DX-912, I believe there's
6 an agreement between the parties that that would not be entered
7 into evidence. It can be shown to the jury but not entered in.

8 THE COURT: Okay.

9 MR. POST: That's correct. That was the parties'
10 agreement and understanding.

11 THE COURT: Okay. I'll make sure we take
12 that off the list. What's the number again?

13 COURTROOM DEPUTY: 912.

14 MR. SALTMAN: It's DX-912, Your Honor.

15 THE COURT: Because we may have entered it
16 based on our -- my procedure because it was
17 utilized.

18 And then I do have one question. I think in Mr.
19 Michaelson's deposition it seemed to me that two of the
20 exhibits were numbered the same thing on the screen when you
21 showed the exhibit number. It seemed like there were two
22 1116, and I presume that the other one was 1117, which is
23 the other minutes, the board minutes. Can you just check
24 that?

25 MR. POST: It may be 1118 but we'll confirm that.

1 THE COURT: I had 1118, but it just seemed
2 like there were two -- you switched exhibits and it
3 seemed like they both were No. 1116. And so I just
4 wondered if that was the 1117. I just put a
5 question mark but I meant to ask.

6 MR. POST: We will go back and confirm and
7 also confer with Imperium's counsel and make sure
8 the record has the correct exhibits.

9 THE COURT: Okay. Then we'll just go ahead and have
10 the informal charge conference tomorrow at 10 a.m. here. And
11 then what I'll do is -- we'll make whatever decisions and then
12 you'll have a chance to make whatever record. We'll just do it
13 a few minutes before, whatever record anyone needs to make, and
14 we'll figure that out tomorrow, what disagreements we have.
15 But I'll let you make your record for that on Monday before
16 closing arguments.

17 I just want to bring up one other thing to your
18 attention. During one of the -- I've been notified by
19 somebody that one of the people that were here earlier, when
20 the courtroom was sealed, apparently there was some -- it
21 was a man that was standing in between the two doors. They
22 were closed.

23 And the person that was reporting it was one of the
24 prosecutors and said you could hear -- standing there you
25 could hear what was going on.

1 The person -- then the person re-entered the courtroom
2 when it was unsealed. I don't know who it was, but I got a
3 message saying that that had happened. I don't know which
4 side it was from or even what time period.

5 So I don't -- I raise that to both sides because it's
6 possible maybe it was an attorney that was not coming in
7 because -- waiting until the courtroom was reopened. I
8 don't know, so --

9 MR. HARNETT: Obviously we -- we don't have any
10 problem.

11 MR. JENNER: It was one of those routers from Nokia,
12 Your Honor.

13 THE COURT: What?

14 MR. JENNER: It was one of those routers from Nokia.

15 THE COURT: Okay. I'm not necessarily concerned
16 about it but I wanted to apprise y'all of it.

17 MR. FISCH: No issues for Imperium, Your Honor.

18 THE COURT: Okay.

19 MR. POST: Your Honor, one more final
20 point. Samsung would like to file two offers of
21 proof, one on the Sony license issue, the other on
22 the laches issue, to address excluded evidence to
23 preserve our rights for appeal. And we would
24 propose we submit those as soon as possible, short
25 papers identifying the evidence that would have been

1 presented

2 THE COURT: Okay. So what do you want to present on
3 the issue of the -- let me make sure I understand what you're
4 giving to me on the issue of the Sony license issue.

5 MR. POST: Sure. So the Sony license issue
6 submission will lay out Sony's specific evidence, particularly
7 testimony that would have been elicited from witnesses who did
8 testify related to the Sony issue and identify our position
9 that that information should come out in the same trial with
10 the substantive infringement issues, understanding that Your
11 Honor has proposed dealing with those in a post-trial
12 proceeding.

13 But since we don't know what that's going to look like,
14 in order to properly preserve our rights, we think that this
15 submission is something that is appropriate and should go
16 in.

17 THE COURT: Well, you can submit it and I'll consider
18 whether to accept that as an offer of proof or not. I'm hoping
19 to consider that issue over the weekend to see -- try to see if
20 I can come to a decision on that issue of how that will proceed
21 after it's over.

22 What was the other issue?

23 MR. POST: We're happy to wait until Monday if that's
24 something Your Honor would like to do. See how things play
25 out.

1 THE COURT: That's fine. What was the
2 second offer you wanted to make?

3 MR. POST: The second offer would relate to any
4 additional evidence related to laches. Obviously, we did make
5 our objection. You did overrule it. But in order to preserve
6 any rights to appeal, we believe we have to submit that offer
7 of proof.

8 THE COURT: Well, I don't know. I'll have
9 to study my appellate procedure whether or not it's
10 appropriate at this point to do that. Because like
11 the issue that was brought up at the bench about Mr.
12 Kaler is that his testimony was never offered, so I
13 never had an opportunity to consider the issue while
14 the evidence was still coming in whether there were
15 any portions of his testimony that would be allowed
16 or not.

17 So, I mean, you can submit whatever you
18 want to in writing. I don't know if I'll accept it
19 or not as a proper offer of proof at this point.

20 MR. POST: Thank you, Your Honor.

21 THE COURT: Okay. Anything else?

22 MR. FISCH: Nothing from Imperium, other than thank
23 you, Your Honor.

24 MR. HARNETT: Thank you, Your Honor. See you
25 tomorrow.

THE COURT: Okay. Very good.

COURT SECURITY OFFICER: All rise.

(Court adjourned.)

I certify that the foregoing is a correct transcript from
the record of proceedings in the above-entitled matter.

Judith Werlinger

Date